**15” LCD TV Color Monitor** **Chassis Name: TP 1.1U-EA**

Service
Service
Service

15MF400T/37

# Service Manual

Horizontal Frequency

31.5-60 kHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING


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## Important Safety Notice

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Proper service and repair is important to the safe, reliable operation of all Philips Company** Equipment. The service procedures recommended by Philips and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. Philips could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, Philips has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Philips must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

* * Hereafter throughout this manual, Philips Company will be referred to as Philips.

*WARNING*

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from Philips. Philips assumes no liability, express or implied, arising out of any unauthorized modification of design.

Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

-Must mount the module using mounting holes arranged in four corners.

-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.

-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.

-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).

-Make certain that treatment person’s body is grounded through wristband.

-Do not leave the module in high temperature and in areas of high humidity for a long time.

-Avoid contact with water as it may a short circuit within the module.

-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

# 1. Specification For LCD TV

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## 1.1 General Specifications

| Item | | Specification |
|---|---|---|
| **LCD Panel** | Screen Size | 15" |
| | Aspect Ratio | 4:3 |
| | Resolution | 1024x768 |
| | Brightness | 250cd/m² (typ.) |
| | Contrast Ratio | 400:1 |
| | Response Time | 16ms |
| | Viewing Angle | Left/right = 60°/60°<br>Up/down = 40°/60° |
| | Display Colors | 16.7M |
| **TV Function** | TV Tuner | NTSC M |
| | Color System | NTSC |
| | Sound System | MTS + SAP |
| | Closed-Caption & V-chip | Yes |
| **Video Input** | Composite | X1 |
| | S-Video | X1 |
| | Closed-Caption & V-chip | Yes |
| | Color System | NTSC/PAL |
| **PC Input** | Signal Input | Analog |
| | Horizontal Frequency (kHz) | 31.5~60 |
| | Vertical Frequency (Hz) | 56~75 |
| | Max. Resolution | 1024x768 @ 75Hz |
| | Recommended Resolution | 1024x768 @ 60Hz |
| **Audio Output** | Built-in Speakers | 2 x 2W (L/R) |
| | Headphone Output | Yes (3.5mmφ) |
| **Power** | Power Supply | +12V DC Input |
| | Adapter | 100-240V AC, 50/60Hz |
| | Power Consumption (Max.) | Power on〈50W,<br>Off mode〈2W |
| **Video Feature** | De-interlacer | 2D de-interlacer |
| | Comb Filter | Adaptive 4H Y/C Separation |
| | 3-2 Pull Down Recovery | Yes |
| **Other Features** | Wall Mount | VESA 100mm x 100mm |
| | Multi-Function Remote | Yes |
| | Sleep Timer | Yes |
| | Tilt Angle (front/back) | 5°/15° |
| | OSD language | English/French (Canadian type)/Spanish |
| **Dimension** | With Stand (W x D x H) | 371.6mm x 346 mm x 147.5mm |
| | Without Stand (W x D x H) | 371.6mm x 324mm x 47.5mm |
| | Carton (W x D x H)) | 434mm x 407mm x 192mm |
| **Weight** | Net, kg | 3.5kg |
| | Loose, including package | 5.0kg |
| **Accessory** | Remote controller, Batteriesx2, AC Power adapter, QSG, power cord<br>User manual<English/French (Canadian type)><br>(Including Limited Warranty <English only>) | |



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## 1.2 Use Of Remote Control

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**POWER:**
Press to turn on/off the TV. The TV is never completely powered off unless it is physically unplugged.

**CH**
Press ∧ or ∨ (▲or▼) to browse through the TV channels, which are not erased. To view a blocked channel, use the digital buttons to access，the channel and enter your access code.

**VOL**
Press + or – to adjust the volume.

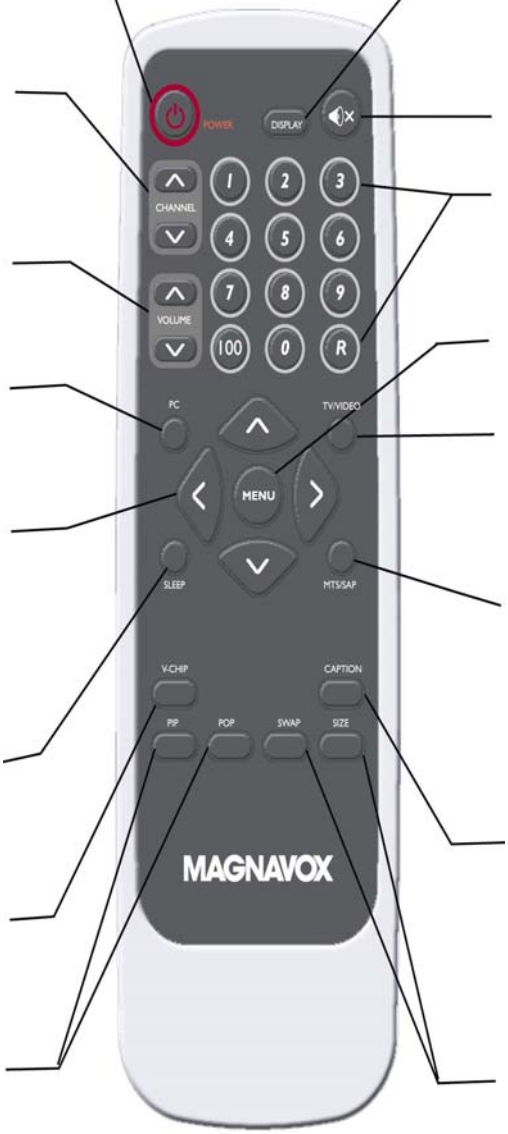
PC
Select your input source to PC.

**PRE-CH**
To display the previously selected TV channel.

**SLEEP**
With this key you can set a time period after which the TV should switch itself to standby. Press the key repeatedly to select the number of minutes
number of minutes. The counter runs from 30,60,90,120 minutes.

**V-CHIP**
Press this button to setup parental control.

**PIP/POP**
Not Supported.




**DISPLAY**
Press this button to Display Channel number on the right-top corner.

**MUTE**
Temporarily interrupt the sound or restore it.

**0~9/100 Digit buttons**
To select a TV channel.

**MENU**
Press repeatedly to display main menu Or display OSD menu.

**TV/VIDEO**
Select your input source: press repeatedly to select **TV, AV, S-VIDEO**

**MTS /SAP**
Press this key to activate Multi-channel Television Sound, Stereo or Mono.

**CAPTION**
Press this button to turn **Closed Caption** on. Be sure you have selected Caption On in the Setup menu.

**SIZE/SWAP**
Not Supported.

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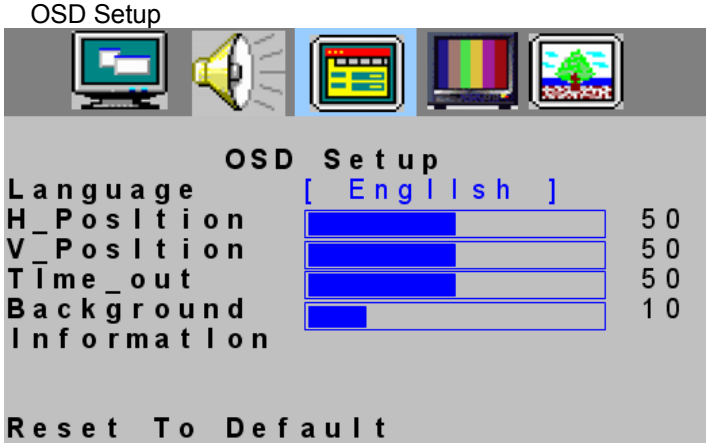
## 1.3 OSD Instructions

### OSD Setting

1. Press ”MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select submenu

OSD Setup




### Remote Control

### Language

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select “Language” option
4. Press > or < key to select language, there are three kinds of language to select: English、French、 and Spanish
5. After adjustment, press “MENU” key to exit or press ∧ or ∨ key to adjust other options

### H_ Position

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select “H Position” option
4. Press > or < key to adjust OSD horizontal position
5. After adjustment, press “MENU” key to exit or press ∧ or ∨ key to adjust other options

### V_ Position

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select “V Position” option
4. Press > or < key to adjust OSD vertical position
5. After adjustment, press “MENU” key to exit or press ∧ or ∨ key to adjust other options

### Time-out

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select “Time out ” option
4. Press > or < key to adjust OSD display time
5. After adjustment, press “MENU” key to exit or press ∧ or ∨ key to adjust other options

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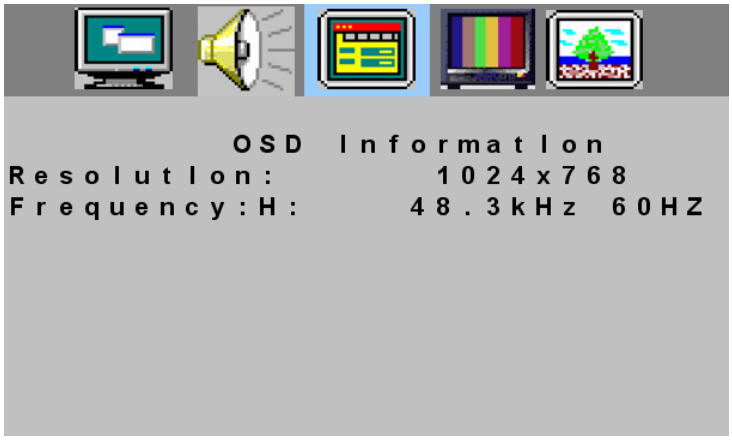
**Background**
1. Press ”MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select “Background ” option
4. Press > or < key to adjust OSD background
5. After adjustment, press “MENU” key to exit or press ∧ or ∨ key to adjust other options

**Information**：This option can only be operated on PC signal source
1. Press “MENU” key to open OSD menu
2. Press > or < key to select “OSD SETUP” option
3. Press ∧ or ∨ key to select “Information” option
4. Press > or < key then the screen will display the current input information
5. Press “MENU” key to exit information menu




**Video Recorder**
How to connect
1. Connect the antenna to VCR RF input
2. Connect the other RF cable from VCR output to TV input, if you connect the VCR video frequency to TV’s AV input connector, you will get the better quality of video and audio
3.TV’s AV input does not provide audio frequency, so you need to connect VCR audio frequency output to TV’s audio frequency input
   If your VCR is equipped with S-VHS video port:
   For improved picture quality, connect a S-Video cable with the S-VIDEO input on the TV instead of connecting the VCR to the VIDEO port.
   S-Video does not provide audio, audio cables must still be connected to provide sound

**Watching VCR**
1. If you use TV connection, select the TV channel search.
2. If you use AV connection, select AV
3. If you use S-Video connection. Select s-video
4. Insert videotape in the VCR and press the PLAY button

**Camera /Camcorder/ Video Game Set**
1. Connect the video output port of Camera /Camcorder/ Video Game Set to the AV input of TV
2. Connect the left and right audio channels of Camera /Camcorder/ Video Game Set to the left and right channels of audio input of TV

If your Camera /Camcorder/ Video Game Set are equipped with S-VHS video port:
For better quality picture, please connect the S-Video cable to the S-Video input of TV. Connect the left and right channels of Camera /Camcorder/ Video Game Set to the left and right channels of audio input of TV
How to play
If you use AV connection, please select AV;
If you use S-Video connection, please select S-VIDEO;

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**DVD Player**

1. Connect the video output port of DVD player to the AV input port of TV
2. Connect the left and right audio channels of DVD to the left and right channels of audio input of TV

If your DVD player is equipped with S-VHS video port:
For better quality picture, please connect the S-Video cable to the S-Video input of TV. Connect the left and right channels of DVD to the left and right channels of audio input of TV
How to play
If you use AV connection, please select AV;
If you use S-Video connection, please select S-VIDEO;

**Digital Set Top Box**

**How to connect**

1.Connect the video output port of Digital Set Top Box to the AV input of TV
2. Connect the left and right audio channels of Digital Set Top Box to the left and right channels of audio input of TV

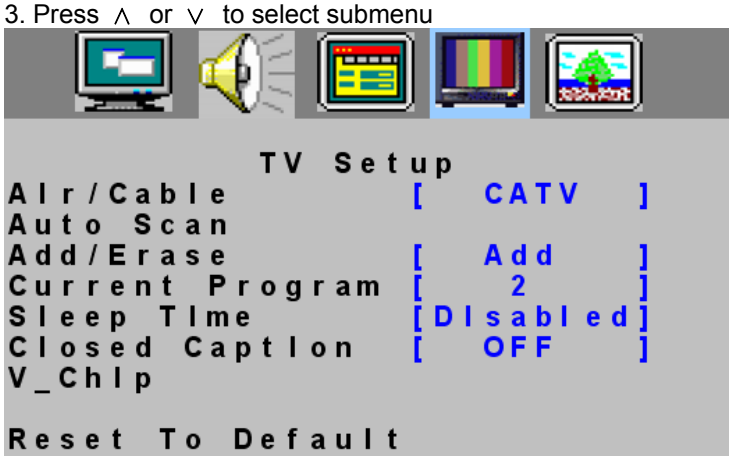
**How to use**

1.Select AV.
2.Turn on the DTV Set Top Box set.

*Warning: In case you notice scrolling images, wrong colors or no color, no picture or even combinations of these, on your screen, check if the connections are done in the right way. Check if the cable colors match with the Input connector colors.*

**TV Setup Menu**

Note: Air/Cable, Auto Scan, Current Program，Sleep Time option can only display on TV Source
1. Press ''MENU'' key to open OSD menu
2. Press > or < key to select "TV SETUP'' option
3. Press ∧ or ∨ to select submenu




**TV Channel Installation**

**AIR/CATV**

1. Press "MENU'' key to open OSD menu
2. Press > or < key to select "TV SETUP'' option
3. Press ∧ or ∨ key to select "AIR/CATV" option
4. Press > or < key to select the automatic search system that your TV need, there are four options: CATV, AIR, HRC, IRC.
5. Press "MENU" key to exit AIR/CATV menu or press ∧ or ∨ key to adjust other options

**Auto scans**

Channel auto search and memorize all viewable channel.
1.Press "MENU'' key to open OSD menu
2. Press > or < key to select "TV SETUP'' option
3. Press ∧ or ∨ key to select "Auto scan" option
4. Press > or < key to select auto search.
Note: During the search, if you want to exit, you can press the "MENU" key, other keys are not of function, except the "MENU" key.

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**Channel Edit**

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “TV SETUP” option
3. Press ∧ or ∨ key to select “Add/Erase” option
4. Press > or < key to select Add or Erase.
5. Press “MENU” key to exit Add/Erase menu or press ∧ or ∨ key to adjust other options

Current Program

Current program is the channel set by the current TV, you can press “display” key to display the current channel on the top right of the screen.

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “TV SETUP” option
3. Press ∧ or ∨ key to select “Current program” option
4. Press > or < key to select the channel.
5. Press “MENU” key to exit Current Program menu or press ∧ or ∨ key to adjust other options

   You can also press the digital keys 0-9/100 or channel ∧ or ∨ on the remote control to select channel

**Sleep Time**

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “TV SETUP” option
3. Press ∧ or ∨ key to select “Sleep Time” option
4. Press > or < key to select the sleep time that you need to set, you can select 30/60/90/120 minutes sleep time.
5. Press “MENU” key to exit sleep time menu or press ∧ or ∨ key to adjust other options

   You can also press, “SLEEP” on the remote control, the sleep time will display on the top right of the screen.

**Channel Lock**

**Closed Caption**

1. Press “MENU” key to open OSD menu
2. Press > or < key to select “TV SETUP” option
3. Press ∧ or ∨ key to select “Closed caption” option
4. Press > or < key to set CC1~CC4 and TT1 and TT4.
5. Press “MENU” key to exit Closed Caption menu or press ∧ or ∨ key to adjust other options

   You can also press “Caption” on the remote control, enter Closed Caption menu directly, then press step 4 to adjust.

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Caption Mode: CC1~CC4
Dialogue (and descriptions) for the action on the captioned TV program shows on screen.

Text Mode: TT1~TT4
Often used for channel guide, schedules, bulletin board information for Closed Caption programs, news, weather information or stock marker reports.
Not all Closed Caption modes are necessarily being use by a TV channel during the transmission of a Closed Caption program.

**V-Chip**
It is the parental control function (V-chip). It is used to block program viewing based on the ratings by the broadcaster. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen be blocked. It is also possible to block all program viewing for a time period.
1. Press "MENU" key to open OSD menu
2. Press > or < key to select "TV SETUP" option
3. Press ∧ or ∨ key to select "V _Chip" option
4. Press > or < key to enter V _Chip password validation menu.
   You can press V-CHIP key on the remote control to enter the menu directly.

Press digital keys on the remote control; enter the password to go into V-CHIP control menu
(Default password is :0000), if your password is error, then the screen will display "PIN ERROR".

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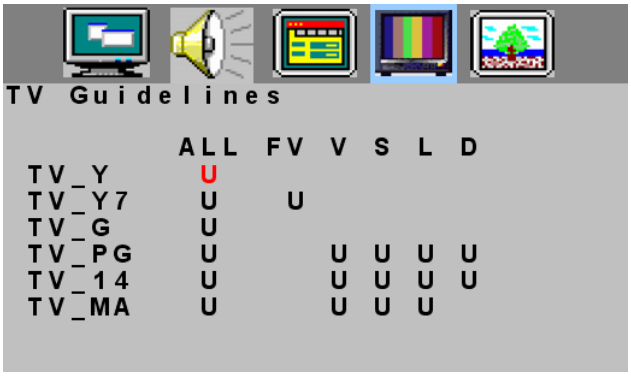
1. After enter the V-CHIP menu, press ∧ or ∨ key to select, if you want to set V-CHIP, you need to set the “status” on the condition of “ON”.

①. Press > or < key to select “Status” option
②.Press > or < key to select “ON” or “OFF”

6. TV Guideline Setting
①. Press ∧ or **v** key to select “TV Guideline” option
②. Press > or < key to enter “TV Guideline” menu
③. Press ∧ or ∨ key to select block item.
④. Press > or < key to select U or B, selecting U means “Unlock”, selecting B means “Block”.
⑤. If the setting is OK, press “MENU” key to exit TV-Guideline menu.




7. Movie Guideline Setting
①. Press ∧ or v key to select “Movie Guideline” option.
②. Press > or < key to enter Movie Guideline menu.
③. Press ∧ or ∨ key to select block item.
④. Press > or < key to select U or B, selecting U means “Unlock”, selecting B means “Block”.
⑤. If the setting is OK, press “MENU” key to exit Movie Guideline menu.

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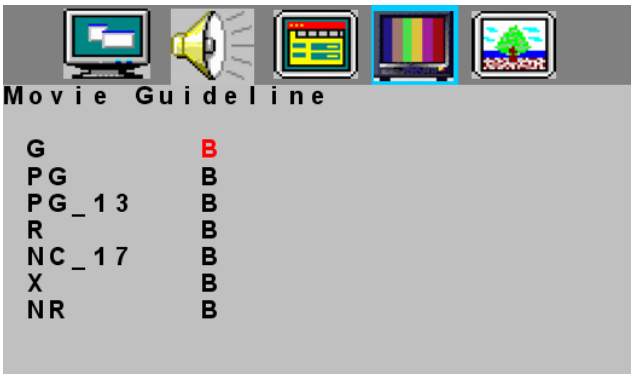
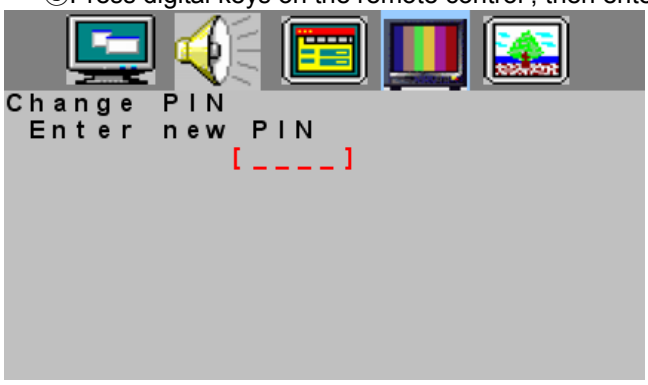



8.Change PIN

①Press ∧ or ∨ key to select “Change PIN” option

②.Press > or < key to enter Change PIN menu.

③Press digital keys on the remote control , then enter the new password.




④Enter the new password again , if the setting is OK, the display information as below, then it will exit the Change PIN menu automatically.

Reset to Default

1. Press “MENU” key to open OSD menu.
2. Press > or < key to select any Setup options
3. Press ∧ or ∨ key to select “Reset to Default” option.
4. Press > or < key to reset.

Reset to Default is convenient for all settings in the user OSD to recall to factory default data.

Note: The reset to default function in each function item is the same under the signal source of AV/TV/S-VIDEO. When we select the Reset to Default in each function item under the PC signal source, it not only recalls all data to default data, but also have an adjustment automatically.

Sound Set Up Menu

1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “Audio Setup” option
3. Press ∧ or ∨ key to select submenu.

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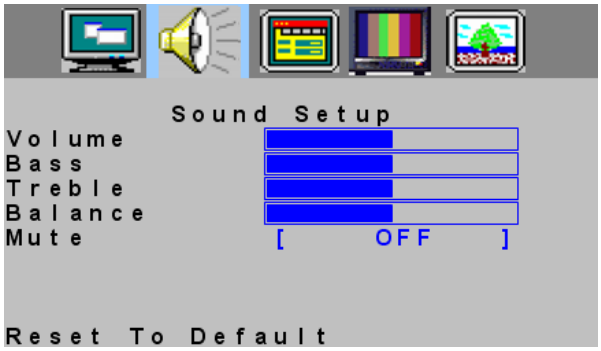

Volume
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “Sound Setup” option.
3. Press ∧ or ∨ key to select “Volume” option
4. Press > or < key to adjust Volume data.
   You can also press Volume ∧ or ∨ key and > or < key on the remote control to adjust volume.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others

Bass
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “Sound Setup” option
3. Press ∧ or ∨ key to select “Bass” option.
4. Press > or < key to adjust Bass data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Treble
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “Sound Setup” option
3. Press ∧ or ∨ key to select “Treble” option.
4. Press > or < key to adjust Treble data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Balance
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “Sound Setup” option
3. Press ∧ or ∨ key to adjust “Balance” option.
4. Press > or < key to adjust “Balance” data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Mute
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “Sound Setup” option
3. Press ∧ or ∨ key to select “Mute” option.
4. Press > or < key to select ON/OFF.
   You can also press key on remote control to select mute, after the selection you can adjust the volume or press to cancel the mute
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

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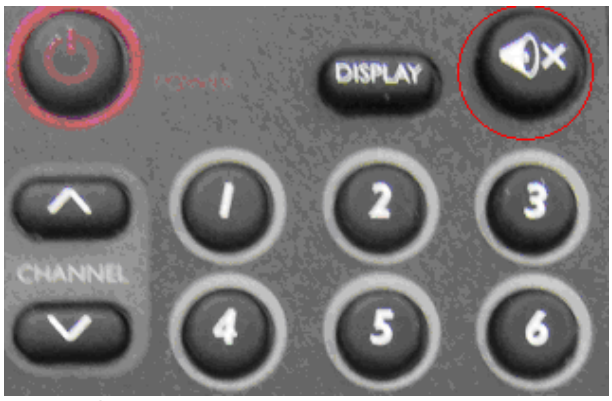
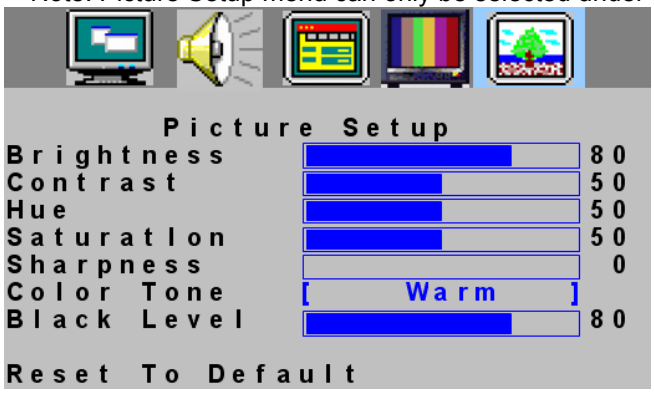



Picture Set Up Menu
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select submenu.
   Note: Picture Setup menu can only be selected under the signal source of AV/TV/S-VIDEO.




Brightness
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Brightness” option.
4. Press > or < key to adjust Brightness data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others

Contrast
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Contrast” option.
4. Press > or < key to adjust Contrast data.
5. Press “MENU” to exit or press ∧ or ∨key to adjust others

Hue
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Hue” option.
4. Press > or < key to adjust Hue data.
5. Press “MENU” to exit or press key to adjust others.

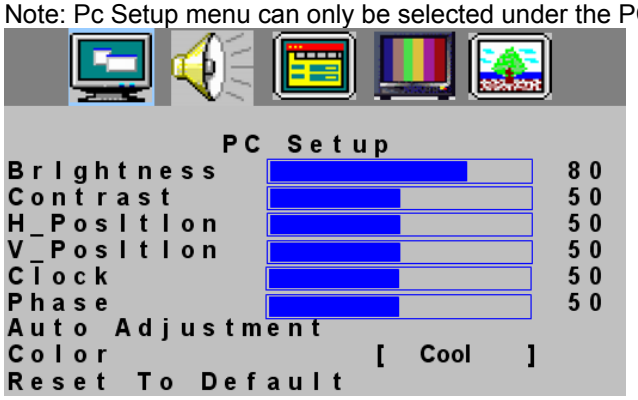
Saturation
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Saturation” option.
4. Press > or < key to adjust Saturation data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Sharpness
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Sharpness” option.
4. Press > or < key to adjust sharpness data.
5. Press “MENU” to exit or Press key to adjust others.

Color Tone
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Color Tone” option.
4. Press > or < key to select warm or cool color
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Black Level
1. Press “MENU” key to open OSD menu.
2 Press > or < key to select “ Picture Setup” option
3. Press ∧ or ∨ key to select “Black Level” option.
4. Press > or < key to adjust Black level data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

PC Set Up Menu
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc” option
3. Press ∧ or ∨ key to select submenu
Note: Pc Setup menu can only be selected under the PC signal source




Brightness
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup ” option
3. Press ∧ or ∨ key to select “Brightness” option.
4. Press > or < key to adjust Brightness data.
5. Press “MENU” to exit or Press ∧ or ∨ key to adjust others.

Contrast
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “Contrast” option.
4. Press > or < key to adjust contrast data.
5. Press “MENU” to exit or Press ∧ or ∨ key to adjust others.

H_ Position
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “H_ Position” option.
4. Press > or < key to adjust H_ Position data.
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

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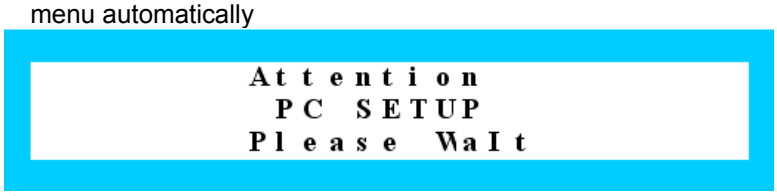
V_ Position
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “V_ Position” option.
4. Press > or < key to adjust “V_ Position” data
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Clock
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “Clock” option.
4. Press > or < key to adjust Clock data
5.Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Phase
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “Phase” option.
4. Press > or < key to adjust Phase data
5. Press “MENU” to exit or press ∧ or ∨ key to adjust others.

Auto Adjustment
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “Auto Adjustment” option.
4. Press > or < key to conduct Auto Adjustment, then PC will adjust automatically, if the adjustment is OK, it will exit OSD menu automatically




Color
1. Press “MENU” key to open OSD menu.
2. Press > or < key to select “ Pc Setup” option
3. Press ∧ or ∨ key to select “Color” option.
4. Press > or < key to select Color
   If you choose Color as User, you can adjust R/G/B according to your need
   ①.Press “MENU” key to enter User Color menu.
   ②.Press ∧ or ∨ key to select Red/Green/Blue option.
   ③.Press > or < key to adjust Red/Green/Blue data
   ④.Press MENU TO exit to Color menu
5.Press ∧ or ∨ key to select other adjustment items, then press MENU to exit

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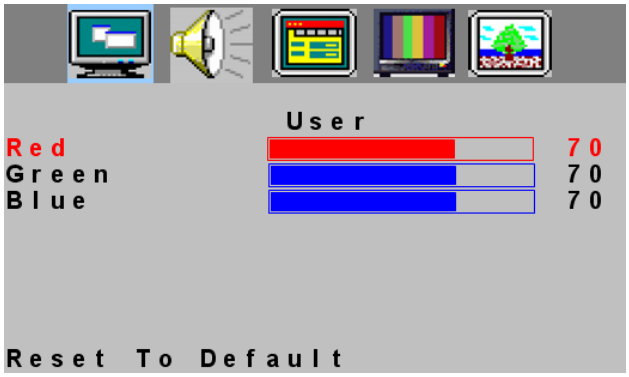


**Tips**

Care of the screen

Do not rub or strike the screen with anything hard as this may scratch, mar, or damage the screen permanently.
Unplug the screen before cleaning the screen. Dust the TV by wiping the screen and the cabinet with a soft, clean cloth.
If the screen requires additional cleaning, use a clean, damp cloth. Do not use liquid cleaners or aerosol cleaners.

Mobile telephone warning
To avoid disturbances in picture and sound, malfunctioning of your TV or even damage to the TV, keep away your mobile telephone from the TV.

End of life directives
We are paying a lot of attention to produce environmentally friendly in green focal areas. Your new receiver contains materials that can be recycled and reused.
At the end of its life specialized companies can dismantle the discarded receiver to concentrate the reusable materials and to minimize the amount of materials to be disposed of.
Please ensure you dispose of your old receiver according to local regulations.

# 2. Precaution And Notices

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## 2.1 Assembly Precaution

(1) Please do not press or scratch LCD panel surface with anything hard. And do not soil LCD panel surface by touching with bare hands (Polarize film, surface of LCD panel is easy to be flawed)
In the LCD panel, the gap between two glass plates is kept perfectly even to maintain display characteristic and reliability. If this panel is subject to hard pressing, the following occurs:
(a) Uniform color
(b) Orientation of liquid crystal becomes disorder

(2) Please wipe out LCD panel surface with absorbent cotton or soft cloth in case of it being soiled.

(3) Please wipe out drops of adhesive like saliva and water in LCD panel surface immediately.
They might damage to cause panel surface variation and color change.

(4) Do not apply any strong mechanical shock to the LCD panel.

## 2.2 Operating Precaution

(1) Please be sure to unplug the power cord before remove the back-cover. (Be sure the power is turn-off)

(2) Please do not change variable resistance settings in MAIN-BOARD; they are adjusted to the most suitable value. If they are changed, it might happen LUMINANCE does not satisfy the white balance spec.

(3) Please consider that LCD backlight takes longer time to become stable of radiation characteristic in low temperature than in room temperature.

(4) Please pay attention to displaying the same pattern for very long-time. Image might stick on LCD.

## 2.3 Storage Precaution

(1) When you store LCD for a long time, it is recommended to keep the temperature between 0°C -40°C without the exposure of sunlight and to keep the humidity less than 85% RH.

(2) Please do not leave the LCD in the environment of high humidity and high temperature such as 60°C, 85%RH.

(3) Please do not leave the LCD in the environment of low temperature; below -25°C.

## 2.4 High Voltage Warning

The high voltage was only generated by INVERTER module on Power Board, if carelessly contacted the transformer on this module, can cause a serious shock. (The lamp voltage after stable around 600V, with lamp current around 8mA, and the lamp starting voltage was around 1500V, at Ta=25°C)

# 3. D-SUB Pin Descriptions

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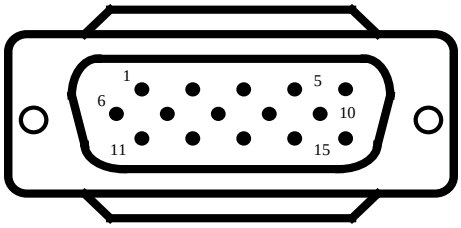
## 3.1 D-SUB Connector

This procedure gives you instructions for installing and using the LCD TV display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduct ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:




15 - Pin Color Display Signal Cable

| PIN NO. | DESCRIPTION | PIN NO. | DESCRIPTION |
|---|---|---|---|
| 1. | Red Video | 9. | VGA_5V |
| 2. | Green Video | 10. | Sync Ground |
| 3. | Blue Video | 11. | RS-232 RX |
| 4. | RS-232 TX | 12. | Serial Data for DDC |
| 5. | GND | 13. | Horiz. Sync |
| 6. | Ground-R | 14. | Vert. Sync |
| 7. | Ground-G | 15. | Serial Clock for DDC |
| 8. | Ground-B | | |

3. S-Video ( Y /C ): TV rear side : 4 pin Mini-DIN female
   TV: TV rear side : IEC type female
   Video: TV rear side : RCA female (Yellow )
   Audio: TV rear side : RCA female (Red / White )

   Audio Input for AV,S-Video, RCA female ( Red / White )
   Headphone 3.5mm female
4. Apply power to the display by turning the power switch to the "ON" position and allow about ten seconds for Panel warm-up. The Power-On indicator lights "GREEN" when the display is on.
5. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display, or press auto-adjust to get the best picture-quality.
6. This TV (with PC function) has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
7. If your TV requires service, it must be returned with the power cord.

## 3.2 Factory Preset Display Modes

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### Analog RGB Signal Timing

| VESA MODES | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Horizontal | | Vertical | | |
| Mode | Resolution | Total | Nominal Frequency +/- 0.5kHz | Sync Polarity | Nominal Freq. +/- 1 Hz | Sync Polarity | Nominal Pixel Clock (MHz) |
| VGA | 640x480@60Hz | 800 x 525 | 31.469 | N | 59.940 | N | 25.175 |
| | 640x480@72Hz | 832 x 520 | 37.861 | N | 72.809 | N | 31.500 |
| | 640x480@75Hz | 840 x 500 | 37.500 | N | 75.00 | N | 31.500 |
| SVGA | 800x600@56Hz | 1024 x 625 | 35.156 | N/P | 56.250 | N/P | 36.000 |
| | 800x600@60Hz | 1056 x 628 | 37.879 | P | 60.317 | P | 40.000 |
| | 800x600@72Hz | 1040 x 666 | 48.077 | P | 72.188 | P | 50.000 |
| | 800x600@75Hz | 1056x625 | 46.875 | P | 75.000 | P | 49.500 |
| XGA | 1024x768@60Hz | 1344x806 | 48.363 | N | 60.004 | N | 65.000 |
| | 1024x768@70Hz | 1328x806 | 56.476 | N | 70.069 | N | 75.000 |
| | 1024x768@75Hz | 1312x800 | 60.023 | P | 75.029 | P | 78.750 |
| IBM MODES | | | | | | | |
| | | | Horizontal | | Vertical | | |
| Mode | Resolution | Total | Nominal Frequency +/- 0.5kHz | Sync Polarity | Nominal Freq. +/- 1 Hz | Sync Polarity | Nominal Pixel Clock (MHz) |
| DOS | 720x400@70Hz | 900 x 449 | 31.469 | N | 70.087 | P | 28.322 |
| DOS | 640x350@70Hz | 800 x 449 | 31.469 | P | 70.087 | N | 25.175 |
| GA | 1024x768@72Hz | 1304x798 | 57.515 | P | 72.100 | P | 75.000 |
| MAC MODES | | | | | | | |
| VGA | 640x480@67Hz | 864x525 | 35.000 | N | 66.667 | N | 30.240 |
| XGA | 1024x768@75Hz | 1328x804 | 60.241 | N | 74.927 | N | 80.000 |

# 4. Adjustment

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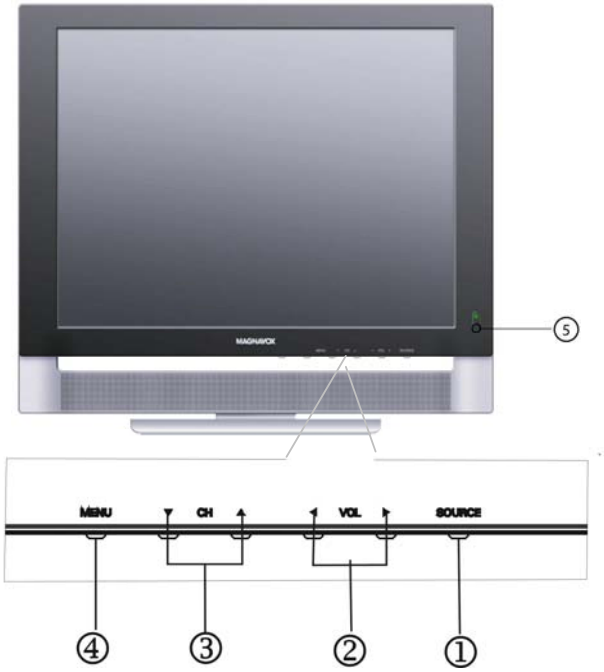
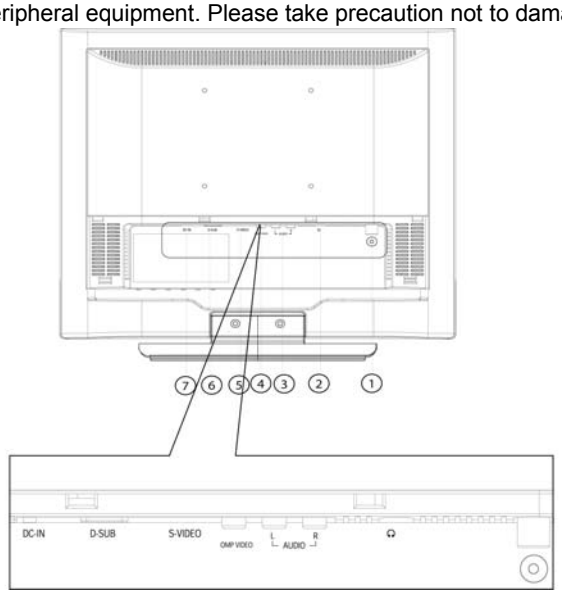
## ▪ Front Panel Control Knobs

| | | |
|---|---|---|
| ① | **Source Key** | Press to select your input source. |
| ② | **> or < Key** | Press to confirm your function selection and adjust the volume |
| ③ | **∧ or ∨ Key** | Press to perform your function selection and adjust TV channel |
| ④ | **MENU Key** | Press to show the OSD menu and exit OSD menu at the TV. |
| ⑤ | **Power Key** | Press to turn on or off the TV. |




## ▪ Preparation

Remove the back plate at the back of the TV as shown on the illustration opposite. Lay the LCD TV with the screen down on a table, as it will be easier to connect your peripheral equipment. Please take precaution not to damage the screen.




| | | |
|---|---|---|
| ① | ⊙ | TV input |
| ② | 🎧 | Earphone jack |
| ③ | **Audio R/L** | Audio Right /Left Channel input |
| ④ | **COMP VIDEO** | AV Input |
| ⑤ | **S-VIDEO** | S-VIDEO Input |
| ⑥ | **D-SUB** | PC Input |
| ⑦ | **DC IN** | 12V DC Power Input |

# 5.Repair Flow Chart

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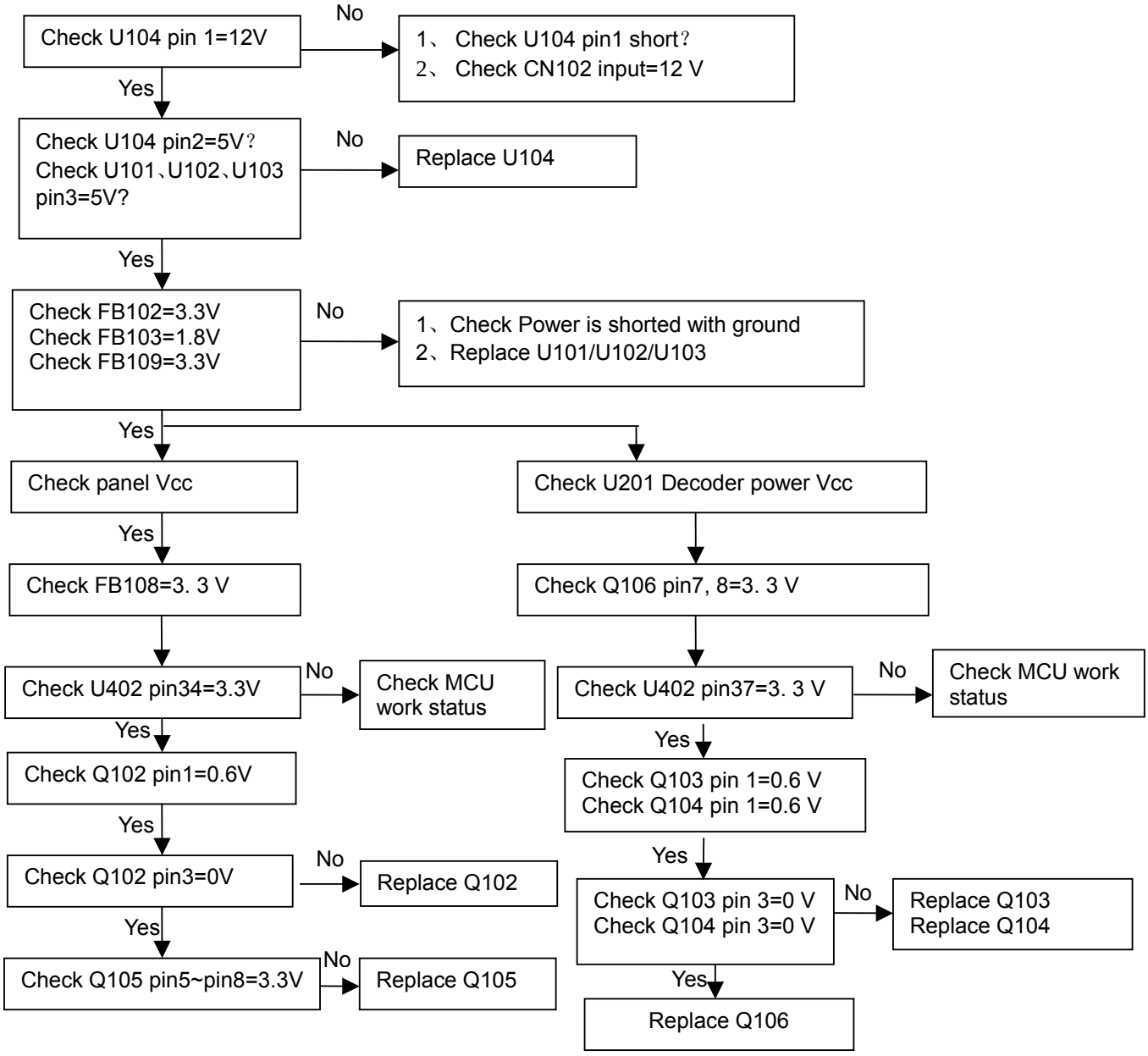
## 5.1. Main board

**No Screen**



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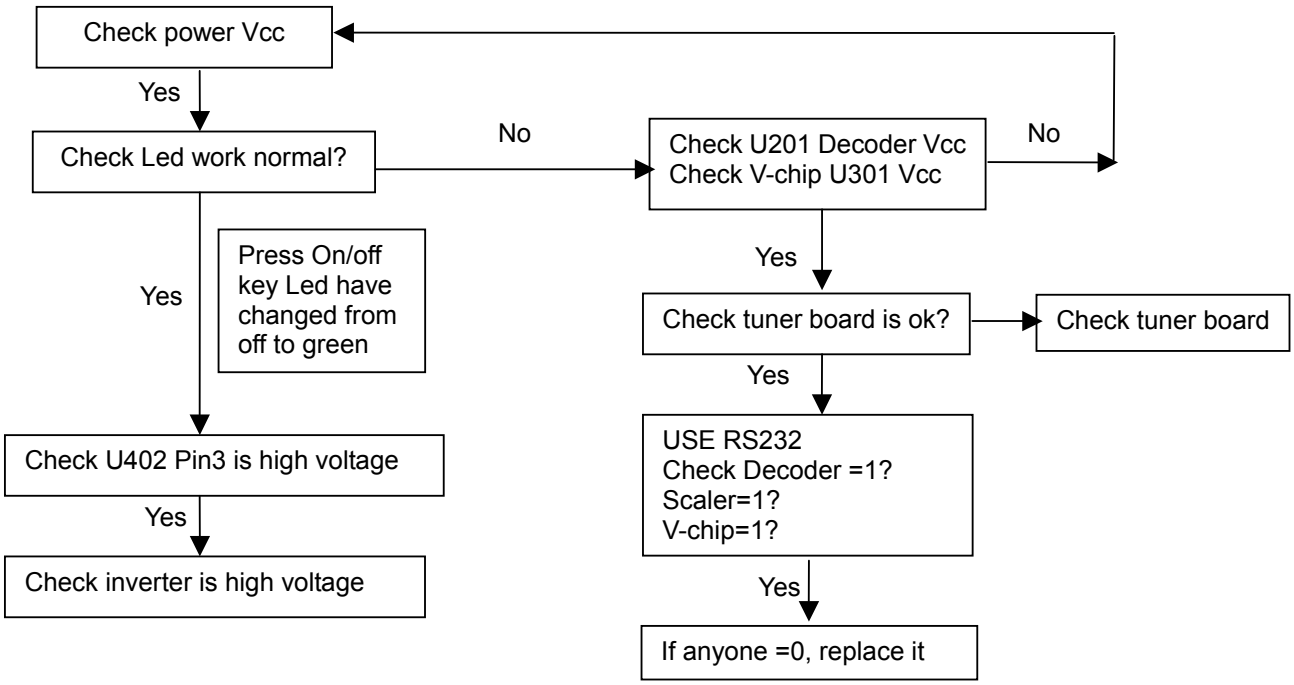

## 5.2. Tuner board

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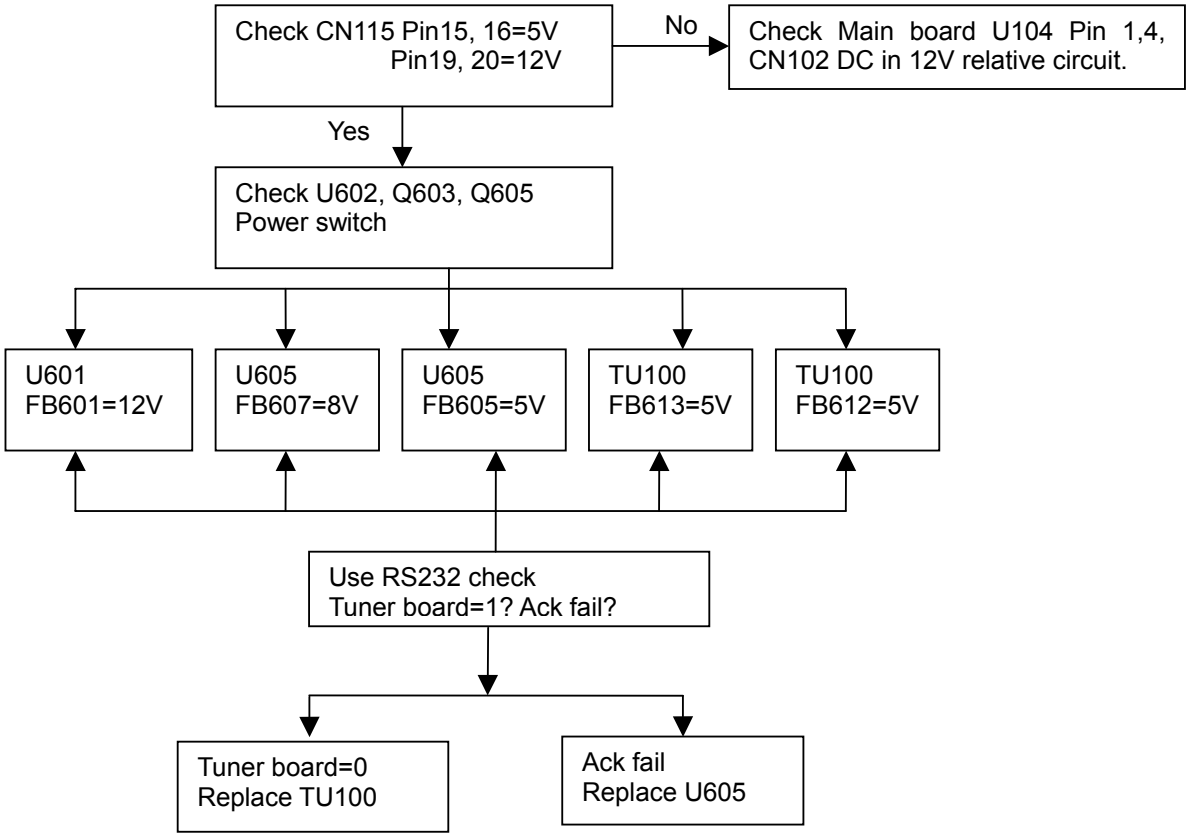

## 5.3. Remote control

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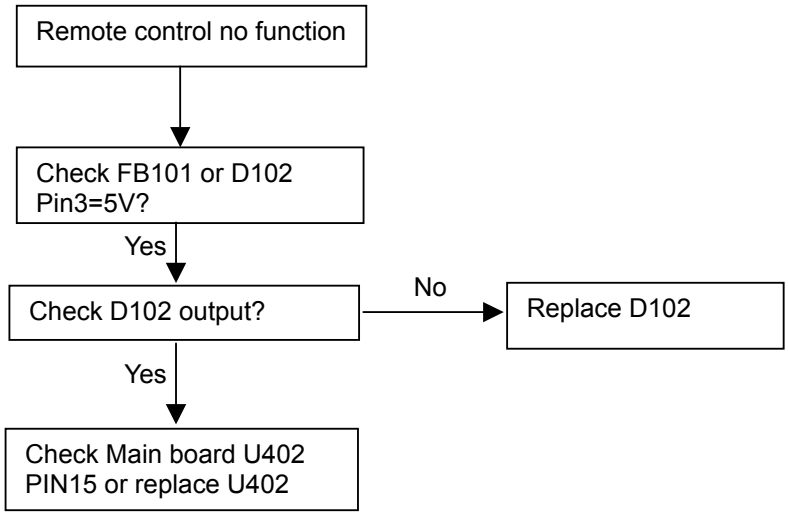
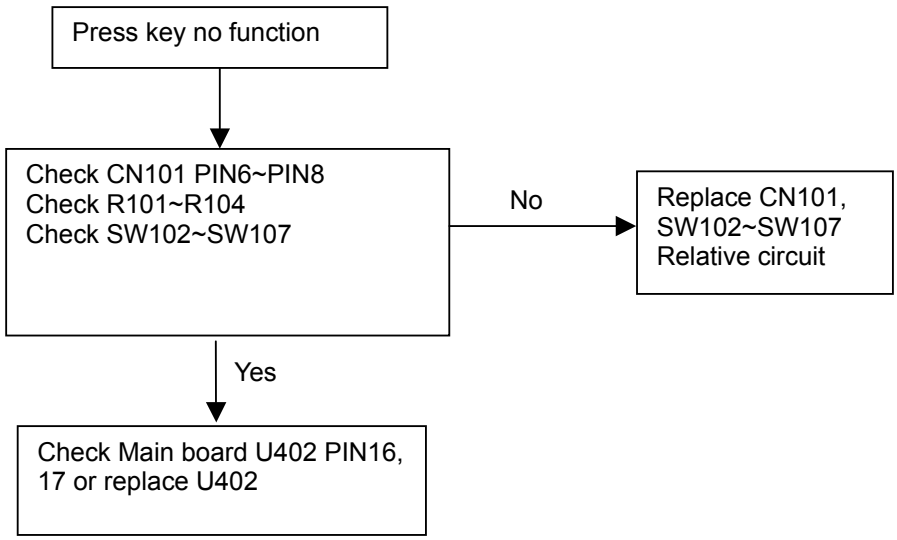



## 5.4. Key Board



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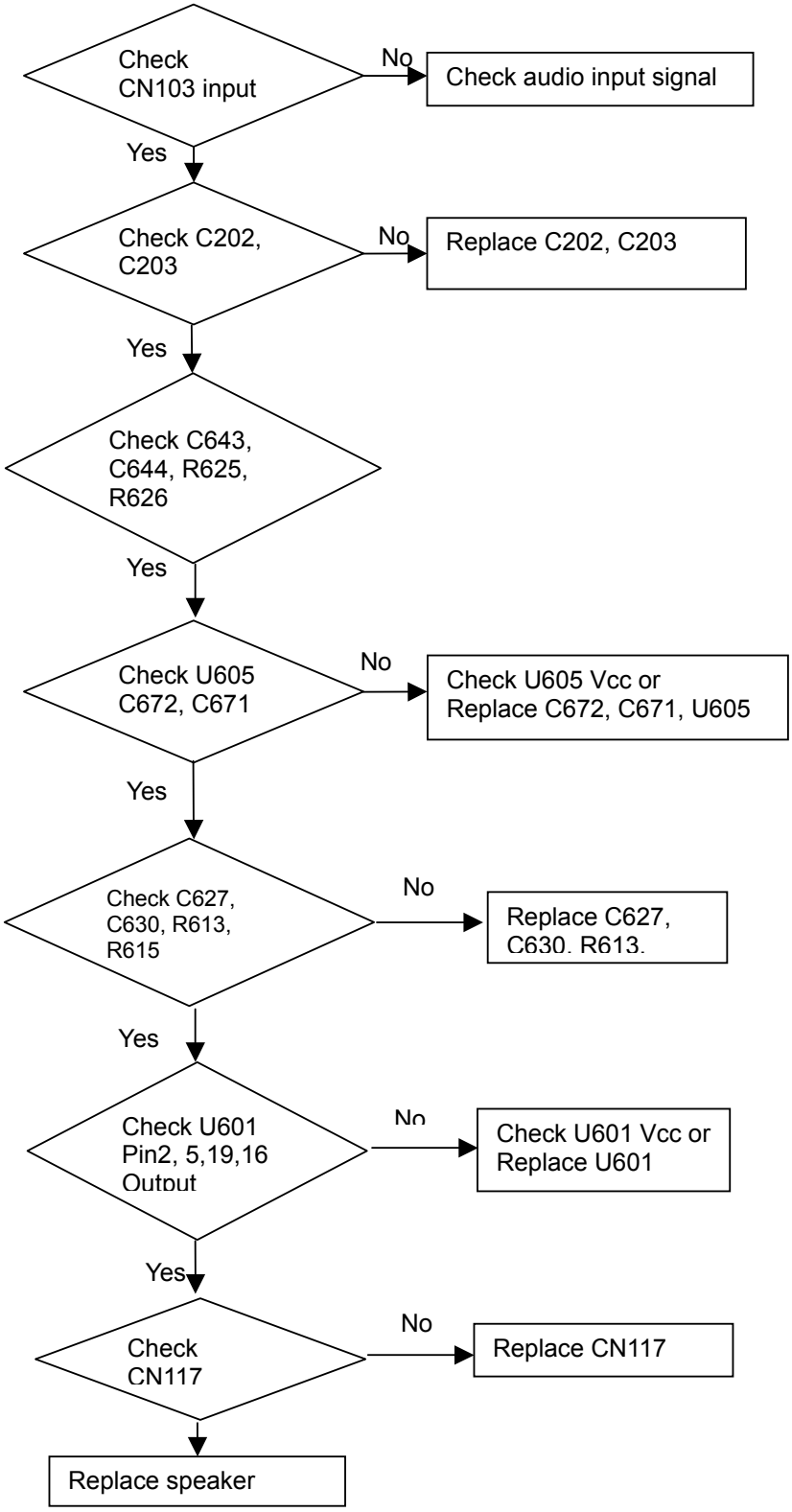
## 5.5. Audio Board




**Note:** 1. If Replace "**MAIN-BOARD**" , Please re-do "DDC-content" programmed & "WHITE-Balance".
2. If Replace " **POWER-BOARD INVERTER**" only, Please re-do " WHITE-Balance"

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## 6. White Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.

Ⅰ.Before started adjust white balance, please setting the Chroma-7120 MEM. Channel 3 to PC 9300 colors, MEM. Channel 4 to PC 6500 color, MEM. Channel 9 to AV 7800 colors, Channel 10 to AV 6500 colors (PC 9300 parameter is x = 283, y = 297, Y = 180 cd/ $m^2$; PC 6500 parameter is x = 313, y = 329, Y = 180cd/$m^2$; AV 7800 parameter is x = 291, y = 306, Y = 180 cd/ $m^2$; AV 6500 parameter is x = 313, y = 329, Y = 180cd/ $m^2$)

| Color Temp. | PC9300 | PC6500 | AV7800 | AV6500 |
|---|---|---|---|---|
| x | 0.283 | 0.313 | 0.291 | 0.313 |
| y | 0.297 | 0.329 | 0.306 | 0.329 |
| Y | 180 | 180 | 180 | 180 |

How to setting MEM.channel you can reference to Chroma-7120 user guide or simple use " SC" key and " NEXT" key to modify x, y, Y value and use "ID" key to modify the TEXT description
Following is the procedure to do white-balance adjust:

・There are two methods to access the factory mode:
1. Press Number key 100 → 9 → 9 → 9;
2. Press the "menu" key, and re-plug power cable at the same time
Though 1 or 2 will access the factory mode, and press "menu" key the OSD will show menu and a word "F" at the right top of Menu.

・ In the factory mode, select "F" function will assess Bias and Gain adjustment.
Auto Level → Auto level adjust.
Black Level →Black level adjust
Gain → R, G, B Gain adjusts.
Offset → R, G, B bias adjusts.
C1 Warm → C1 Warm R, G, B gain adjusts, Contrast and Brightness adjust.
C2 Cool → C2 Cool R, G, B gain adjusts, Contrast and Brightness adjust.
C3 User → C3 User R, G, B gain adjusts, Contrast and Brightness adjust.
Av Warm → Av Warm R, G, B gain adjusts, Contrast and Brightness adjust.
Av Cool → Av cool R, G, B gain adjusts, Contrast and Brightness adjust.
Burn In → Setup Burn-in mode ON / OFF.
Return → Exit "F" function factory mode menu.

Ⅱ. Bias (Low luminance) adjustment:
1. Press "AUTO" button.
2. Set the contrast on OSD window to the value=51, color (user) R, G, B set to "50"
3. Adjust the brightness on OSD until chroma 7120 measurement reach the value Y>180 cd/$m^2$

Ⅲ. Gain adjustment:
A. Adjust PC9300 color-temperature:

1. Set the Contrast of OSD function to 45 and Adjust Brightness to chroma-7120 Y>180 cd/$m^2$
2. Switch the MEM.channel to Channel 03 (with up or down arrow on chroma-7120)
3. Switch the chroma-7120 to RGB-mode (with press "MODE" button)
4. The LCD-indicator on chroma-7120 will show x =283, y = 297, Y = 180cd/$m^2$
5. Adjust the Color (user) Mode: RED on OSD window, until chroma 7120 indicator reached the value R=100
6. Adjust the Color (user) Mode: GREEN on OSD window, until chroma-7120 indicator reached the value G=100
7. Adjust the Color (user) Mode: BLUE on OSD window, until chroma-7120 indicator reached the value B=100
8. Repeat above procedure (Item 5,6,7) until chroma-7120 RGB value meet the tolerance =100±2
9. Switch the chroma-7120 to xyY mode with press "MODE" button
10. Press Color (9300) on OSD window to save the adjustment result

B. Adjust PC6500 color-temperature:

1. Set the Contrast of OSD function to 45 and Adjust Brightness to chroma-7120 Y>180 cd/$m^2$
2. Switch the MEM.channel to Channel 04 (with up or down arrow on chroma-7120)
3. Switch the chroma-7120 to RGB-mode (with press “MODE” button)
4. The LCD-indicator on chroma-7120 will show x = 313, y = 329, Y = 180cd/$m^2$
5. Adjust the Color (user) Mode: RED on OSD window, until chroma 7120 indicator reached the value R=100
6. Adjust the Color (user) Mode: GREEN on OSD window, until chroma-7120 indicator reached the value G=100
7. Adjust the Color (user) Mode: BLUE on OSD window, until chroma-7120 indicator reached the value B=100
8. Repeat above procedure (item 5,6,7) until chroma-7120 RGB value meet the tolerance =100 ± 2
9. Switch the chroma-7120 to xyY mode with press “MODE” button
10. Press Color (6500) on OSD window to save the adjustment result

C. Adjust AV7800 color-temperature:

You must change to the AV mode first.

1. Set the Contrast of OSD function to 45 and Adjust Brightness to chroma-7120 Y>180 cd/$m^2$
2. Switch the MEM.channel to Channel 09 (with up or down arrow on chroma-7120)
3. Switch the chroma-7120 to RGB-mode (with press “MODE” button)
4. The LCD-indicator on chroma-7120 will show x = 291, y = 306, Y = 180cd/$m^2$
5. Adjust the Color (user) Mode: RED on OSD window, until chroma 7120 indicator reached the value R=100
6. Adjust the Color (user) Mode: GREEN on OSD window, until chroma-7120 indicator reached the value G=100
7. Adjust the Color (user) Mode: BLUE on OSD window, until chroma-7120 indicator reached the value B=100
8. Repeat above procedure (item 5,6,7) until chroma-7120 RGB value meet the tolerance =100 ± 2
9. Switch the chroma-7120 to xyY mode with press “MODE” button
10. Press Color (9300) on OSD window to save the adjustment result

D. Adjust AV6500 color-temperature:

1. Set the Contrast of OSD function to 45 and Adjust Brightness to chroma-7120 Y>180 cd/$m^2$
2. Switch the MEM. Channel to Channel 10 (with up or down arrow on chroma-7120)
3. Switch the chroma-7120 to RGB-mode (with press “MODE” button)
4. The LCD-indicator on chroma-7120 will show x = 313, y = 329, Y = 180cd/$m^2$
5. Adjust the Color (user) Mode: RED on OSD window, until chroma 7120 indicator reached the value R=100
6. Adjust the Color (user) Mode: GREEN on OSD window, until chroma-7120 indicator reached the value G=100
7. Adjust the Color (user) Mode: BLUE on OSD window, until chroma-7120 indicator reached the value B=100
8. Repeat above procedure (item 5,6,7) until chroma-7120 RGB value meet the tolerance =100 ± 2
9. Switch the chroma-7120 to xyY mode with press “MODE” button and be sure the data is
10. Press Color (9300) on OSD window to save the adjustment result

Turn the POWER-button off to on to quit factory mode (in USER-mode, the OSD window location was placed at middle of screen)

## 7. Exploded View

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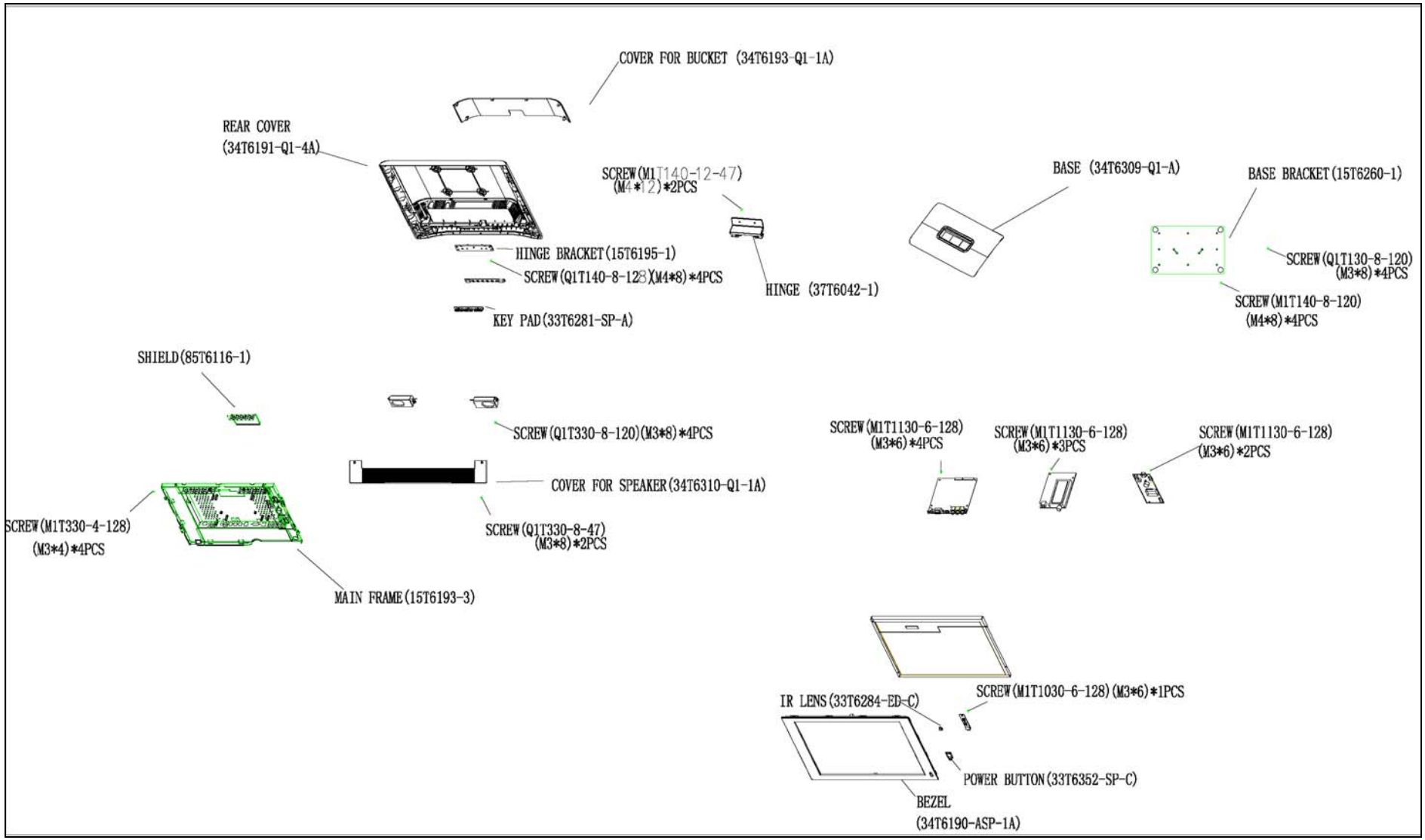




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## 8. Mechanical Instructions

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1. Lay LCD-TV on a flat, soft and clean surface.

Fig 1

2. Remove the screws to remove the base.

Fig 2

3. Open the four clicks on the bottom bezel.

Fig 3

4. Open the four clicks on the right bezel.

Fig 4

5. Open the four clicks on the top bezel.

Fig 5

6. Open the four clicks on the left bezel.

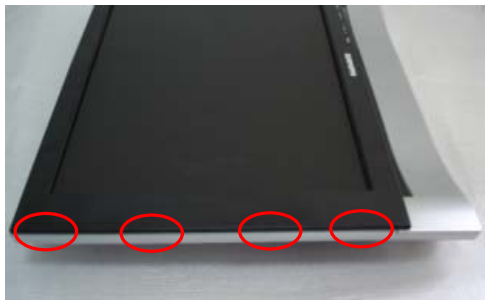

Fig 6

7. Remove the two screws to remove speaker cover.

Fig 7

8. Remove the connect wire of speaker and tuner board.

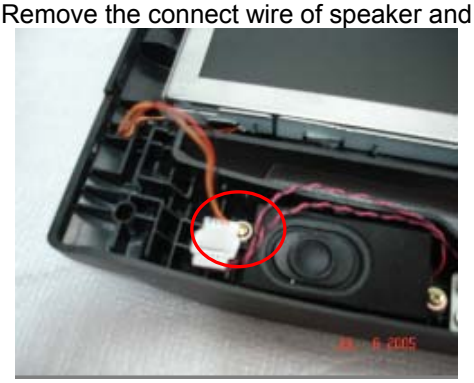

Fig 8

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9. Remove the connector wire of key and IR board.

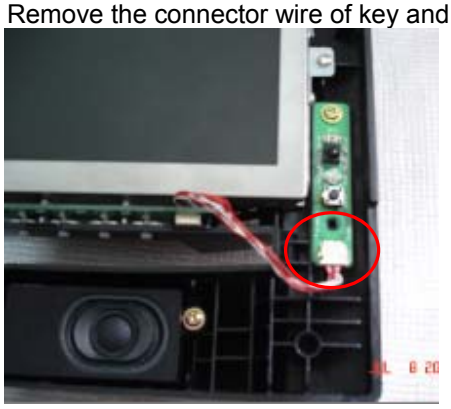

Fig 9

10. Remove the four screws to remove panel.

Fig 10

11. Remove the four screws to remove the speakers.

Fig 11

12. Remove the two screws.

Fig 12

13. Remove the left two screws to remove main frame.

Fig 13

14. Remove the right two screws to remove main frame.

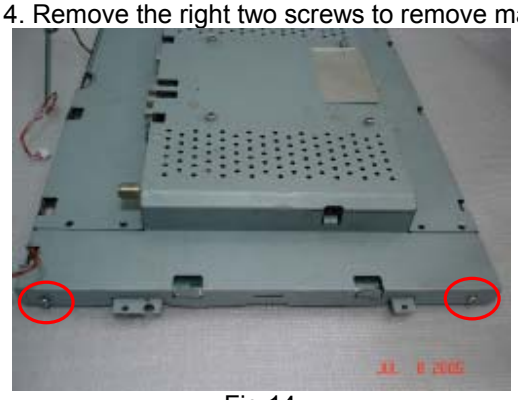

Fig 14

15. Remove the frame as the arrowhead.

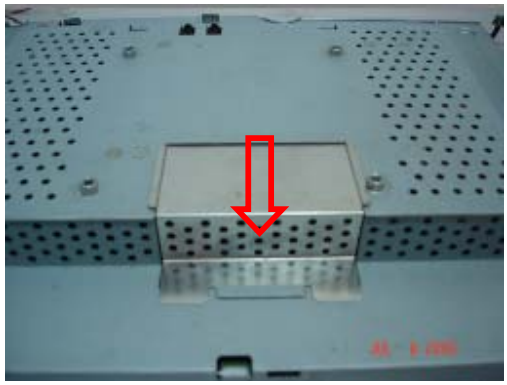

Fig 15

16. Remove the connector wire of panel and main board.

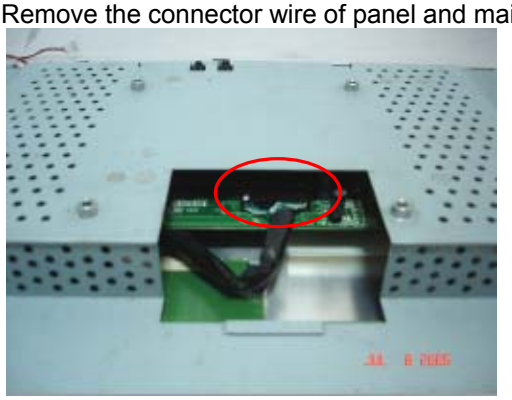

Fig 16

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17. Remove the connector wire of panel and main board.

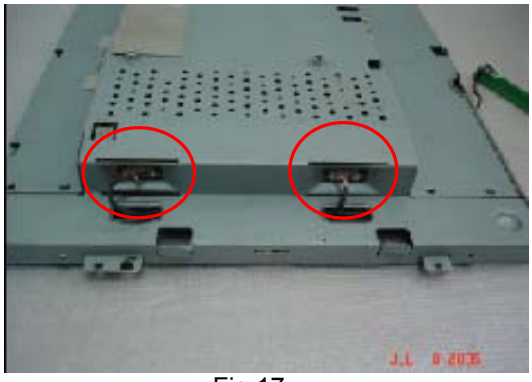

Fig 17

18. Remove the nine screws.

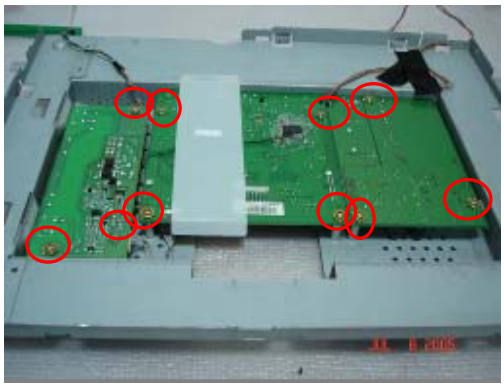

Fig 18

19. Remove the connector of main and tuner board.

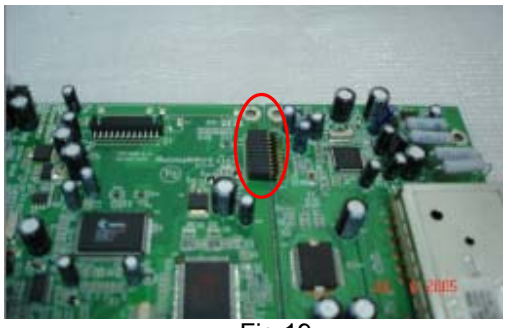

Fig 19

20. Remove the connector wire of main and power board; main board and key board.

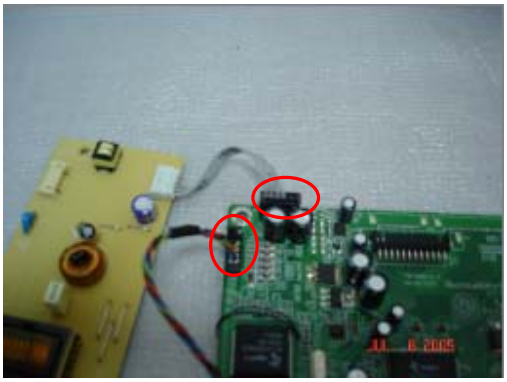

Fig 20

## 9. Spare Parts List

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### Mechanical Parts

| Philips P/N | Vendor P/N | Description |
|---|---|---|
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |
| 9965 000 31020 | 15T61951 | HINGE BRACKET |

### Panel

| Philips P/N | Vendor P/N | Description |
|---|---|---|
| 9965 000 31030 | 750VVD504TB | SVA 15" 4TB PANEL |

### Accessory

| Philips P/N | Vendor P/N | Description |
|---|---|---|
| 9965 000 31031 | 98TR7SW1BEMNF | REMOTE CONTROL |
| 9965 000 31032 | 89T402A18NIS | POWER CORD |
| 9965 000 31033 | 78T329502K | SPEAKER (4OHM 3W) |

### PCB

| Philips P/N | Vendor P/N | Description |
|---|---|---|
| 9965 000 31040 | 44T15018131B | CARTON |
| 9965 000 31041 | 45T88607 | PE BAG FOR MONITOR |
| 9965 000 31042 | 45T886095 | EPE COVER |
| #N/A | 52T602515101 | MYLAR |
| #N/A | 52T602515102 | MYLAR |
| 9965 000 31043 | 44T15031 | EPS |
| 9965 000 31044 | 44T15032 | EPS |
| 9965 000 31045 | 45T88525E | PE BAG |

| | | |
|---|---|---|
| #N/A | 52T602515101 | MYLAR |
| #N/A | 52T602515102 | MYLAR |
| #N/A | 95T801412514 | HARNESS |
| #N/A | 95T801820525 | WIRE HARNESS |
| #N/A | 95T80205512 | AUDIO HARNESS |
| #N/A | 95T80206503 | HARNESS |
| #N/A | 95T802012501 | HARNESS |

## Main Board

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| Location / Item / Position No. | Philips P/N | Vendor P/N | Description |
|---|---|---|---|
| | 9965 000 31301 | 40T4576241B | CPU LABEL |
| | #N/A | 40T45762412B | CBPC LABEL |
| | #N/A | 90T4241 | HEAT IINK |
| | #N/A | 90T60771 | HEAT SINK |
| C107 | 9965 000 31251 | 67T405V1017P | 100UF 50V |
| C112 | 9965 000 31251 | 67T405V1017P | 100UF 50V |
| C120 | 9965 000 31251 | 67T405V1017P | 100UF 50V |
| CN116 | 9965 000 31302 | 33T80324C | WAFER 1.25MM SMT 4P |
| D601 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| FB601 | 9965 000 31303 | 71T56G301EA | CHIP BEAD 300 OHM 0805 |
| FB602 | 9965 000 31303 | 71T56G301EA | CHIP BEAD 300 OHM 0805 |
| FB603 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| FB605 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| FB606 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| FB607 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| FB608 | 9965 000 31303 | 71T56G301EA | CHIP BEAD 300 OHM 0805 |
| FB612 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| FB613 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| Q602 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q603 | 9965 000 31305 | 57T7631 | A03401L SOT23 BY AOS |
| Q604 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q605 | 9965 000 31305 | 57T7631 | A03401L SOT23 BY AOS |
| R603 | 9965 000 31306 | 61V0603330 | CHIP 33 OH 1/16W |
| R604 | 9965 000 31307 | 61V0603151 | CHIP 150 OHM 1/16W |
| R605 | 9965 000 31292 | 61V0603000 | CHIPR 0OHM +-5% 1/10W |
| R606 | 9965 000 31308 | 61V0603221 | CHIP 220 OHM 1/16W 1% |
| R607 | 9965 000 31309 | 61V0603121 | CHIP 120 OHM 1/16W |
| R608 | 9965 000 31310 | 61V0603621 | CHIP 620 OHM 1/16W |
| R612 | 9965 000 31311 | 61V0603103 | CHIPR 10K OHM+-5% 1/10W |
| R613 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R614 | 9965 000 31290 | 61V0603512 | CHIP 5.1K OHM 1/10W |
| R615 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R616 | 9965 000 31290 | 61V0603512 | CHIP 5.1K OHM 1/10W |
| R617 | 9965 000 31311 | 61V0603103 | CHIPR 10K OHM+-5% 1/10W |
| R618 | 9965 000 31312 | 61V0603681 | CHIP 680 OHM 1/16W |
| R619 | 9965 000 31312 | 61V0603681 | CHIP 680 OHM 1/16W |
| R621 | 9965 000 31279 | 61V12060004 | 0 OHM 4A 1/4W |

| | | | |
|---|---|---|---|
| R622 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R623 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R624 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R625 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R626 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R629 | 9965 000 31314 | 61V0603104 | CHIPR 100K OHM+-5% 1/10 |
| R636 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R637 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R638 | 9965 000 31316 | 61V0603223 | CHIP 22KOHM 1/16W |
| R639 | 9965 000 31316 | 61V0603223 | CHIP 22KOHM 1/16W |
| R640 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R641 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R642 | 9965 000 31306 | 61V0603330 | CHIP 33 OH 1/16W |
| R643 | 9965 000 31279 | 61V12060004 | 0 OHM 4A 1/4W |
| U601 | 9965 000 31317 | 56T5353 | TDA7266D |
| U602 | 9965 000 31318 | 56T13330AAC | AZ1117H-ADJ-E1 |
| U605 | 9965 000 31319 | 56T5934 | MSP3425G-QI-B8-V3PMQFP6 |
| C209 | 9965 000 31320 | 67T405V4703P | 47UF 16V |
| C402 | 9965 000 31321 | 67T305V1013 | 1000UF +-2 16V |
| C102 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C104 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C105 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C106 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C108 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C109 | 9965 000 31259 | 65T060322131 | CHIP 220PF 50V NPO |
| C110 | 9965 000 31259 | 65T060322131 | CHIP 220PF 50V NPO |
| C113 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C114 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C115 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C117 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C119 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C121 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C124 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C125 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C126 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C201 | 9965 000 31322 | 65T080568417 | CHIP 0.68UF 16V Y5V |
| C202 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C203 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C204 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C205 | 9965 000 31257 | 65T060347132 | CHIP 470PF 50V NPO |

| | | | |
|---|---|---|---|
| C206 | 9965 000 31257 | 65T060347132 | CHIP 470PF 50V NPO |
| C207 | 9965 000 31323 | 65T060310031 | CHIP 10PF 50V NPO |
| C208 | 9965 000 31322 | 65T080568417 | CHIP 0.68UF 16V Y5V |
| C210 | 9965 000 31323 | 65T060310031 | CHIP 10PF 50V NPO |
| C211 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C212 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C213 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C214 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C215 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C217 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C218 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C219 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C220 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C222 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C223 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C224 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C225 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C226 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C227 | 9965 000 31322 | 65T080568417 | CHIP 0.68UF 16V Y5V |
| C228 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C229 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C230 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C231 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C232 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C234 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C235 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C236 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C237 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C238 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C239 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C240 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C241 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C242 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C243 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C245 | 9965 000 31078 | 65T060315232 | CHIP 1500PF 50V X7R |
| C246 | 9965 000 31325 | 65T060339131 | CHIP 390PF 50V NPO |
| C247 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C248 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C249 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C250 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |

| | | | |
|---|---|---|---|
| C301 | 9965 000 31326 | 65T120610617 | CHIP 10UF 16V Y5V |
| C302 | 9965 000 31326 | 65T120610617 | CHIP 10UF 16V Y5V |
| C304 | 9965 000 31326 | 65T120610617 | CHIP 10UF 16V Y5V |
| C305 | 9965 000 31327 | 65T060310412 | CHIP 0.1UF 50V X7R |
| C306 | 9965 000 31327 | 65T060310412 | CHIP 0.1UF 50V X7R |
| C308 | 9965 000 31327 | 65T060310412 | CHIP 0.1UF 50V X7R |
| C309 | 9965 000 31326 | 65T120610617 | CHIP 10UF 16V Y5V |
| C310 | 9965 000 31327 | 65T060310412 | CHIP 0.1UF 50V X7R |
| C311 | 9965 000 31328 | 65T060356131 | CHIP 560PF 50V NPO |
| C312 | 9965 000 31329 | 65T060368312 | CHIP 0.68UF 16V X7R |
| C313 | 9965 000 31330 | 65T060368232 | CHIP 0.0068UF 50V X7R 0 |
| C314 | 9965 000 31327 | 65T060310412 | CHIP 0.1UF 50V X7R |
| C315 | 9965 000 31328 | 65T060356131 | CHIP 560PF 50V NPO |
| C401 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C403 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C404 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C405 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C406 | 9965 000 31254 | 65T060310131 | CHIP 100PF 50V NPO |
| C407 | 9965 000 31254 | 65T060310131 | CHIP 100PF 50V NPO |
| C408 | 9965 000 31254 | 65T060310131 | CHIP 100PF 50V NPO |
| C409 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C410 | 9965 000 31324 | 65T060322417 | CHIP 0.22UF 16V Y5V |
| C411 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C412 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C413 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C414 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C415 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C416 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C419 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C421 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C422 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C424 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C425 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C426 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C427 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C429 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C430 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C431 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C432 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C433 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |

| | | | |
|---|---|---|---|
| C434 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C435 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C437 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C439 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C440 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C441 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C442 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C443 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C444 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C445 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C446 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C447 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C448 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C449 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C450 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C451 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C452 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C453 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C454 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C455 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| L101 | 9965 000 31331 | 73TM5615110H | 125 150UH+-10% |
| L201 | 9965 000 31332 | 71T56G151AC | 1608 150 OHM |
| L202 | 9965 000 31332 | 71T56G151AC | 1608 150 OHM |
| L203 | 9965 000 31332 | 71T56G151AC | 1608 150 OHM |
| L204 | 9965 000 31332 | 71T56G151AC | 1608 150 OHM |
| Q102 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q103 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q104 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q105 | 9965 000 31286 | 57T7633 | AO4411L SO-8 BY AOS SMT |
| Q106 | 9965 000 31333 | 56T56612 | AO 4801 |
| Q301 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q401 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q402 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| R101 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| R103 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R105 | 9965 000 31314 | 61V0603104 | CHIPR 100K OHM+-5% 1/10 |
| R106 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R107 | 9965 000 31314 | 61V0603104 | CHIPR 100K OHM+-5% 1/10 |
| R108 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R109 | 9965 000 31314 | 61V0603104 | CHIPR 100K OHM+-5% 1/10 |

| | | | |
|---|---|---|---|
| R110 | 9965 000 31311 | 61V0603103 | CHIPR 10K OHM+-5% 1/10W |
| R112 | 9965 000 31311 | 61V0603103 | CHIPR 10K OHM+-5% 1/10W |
| R201 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R202 | 9965 000 31335 | 61V0603105 | CHIP 1MOHM 1/16W |
| R203 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R204 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R205 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R207 | 9965 000 31336 | 61V0603220 | CHIPR 22 OHM+-5% 1/10W |
| R208 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R210 | 9965 000 31292 | 61V0603000 | CHIPR 0OHM +-5% 1/10W |
| R211 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R212 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R213 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R214 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R215 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R216 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R217 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R218 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R219 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R301 | 9965 000 31316 | 61V0603223 | CHIP 22KOHM 1/16W |
| R302 | 9965 000 31337 | 61V0603470 | CHIP 47OHM 1/16W 1% |
| R303 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R304 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R305 | 9965 000 31316 | 61V0603223 | CHIP 22KOHM 1/16W |
| R306 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R307 | 9965 000 31338 | 61V0603682 | CHIP 6.8KOHM 1/16W |
| R308 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R309 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R310 | 9965 000 31311 | 61V0603103 | CHIPR 10K OHM+-5% 1/10W |
| R311 | 9965 000 31292 | 61V0603000 | CHIPR 0OHM +-5% 1/10W |
| R312 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R313 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R401 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R402 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R403 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R404 | 9965 000 31315 | 61V0603473 | CHIP 47K OHM 1/16W |
| R405 | 9965 000 31314 | 61V0603104 | CHIPR 100K OHM+-5% 1/10 |
| R406 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R407 | 9965 000 31314 | 61V0603104 | CHIPR 100K OHM+-5% 1/10 |
| R408 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |

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|---|---|---|---|
| R409 | 9965 000 31335 | 61V0603105 | CHIP 1MOHM 1/16W |
| R410 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R411 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R412 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R413 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R414 | 9965 000 31339 | 61V0603202 | CHIP 2K OHM 1/16W |
| R415 | 9965 000 31339 | 61V0603202 | CHIP 2K OHM 1/16W |
| R416 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R417 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R418 | 9965 000 31339 | 61V0603202 | CHIP 2K OHM 1/16W |
| R419 | 9965 000 31339 | 61V0603202 | CHIP 2K OHM 1/16W |
| R420 | 9965 000 31339 | 61V0603202 | CHIP 2K OHM 1/16W |
| R421 | 9965 000 31339 | 61V0603202 | CHIP 2K OHM 1/16W |
| R422 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R423 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R424 | 9965 000 31338 | 61V0603682 | CHIP 6.8KOHM 1/16W |
| R425 | 9965 000 31340 | 61V0603153 | CHIPR 15KOHM +-5% 1/16W |
| R426 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R428 | 9965 000 31341 | 61V0603752 | CHIPR 7.5K 1/10W |
| R429 | 9965 000 31341 | 61V0603752 | CHIPR 7.5K 1/10W |
| R431 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R432 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R433 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R434 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R435 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R436 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R437 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R438 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R439 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R440 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R447 | 9965 000 31336 | 61V0603220 | CHIPR 22 OHM+-5% 1/10W |
| R448 | 9965 000 31342 | 61V0603821 | CHIP 820 OHM 1/16W |
| R453 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R454 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R455 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R456 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R457 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R460 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R461 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R462 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |

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|---|---|---|---|
| R463 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R464 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R465 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R466 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R467 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R468 | 9965 000 31334 | 61V0603750 | CHIP 75OHM 1/16W |
| R469 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R470 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R471 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R472 | 9965 000 31343 | 61V0603272 | CHIP 2.7KOHM 1/16W |
| R473 | 9965 000 31343 | 61V0603272 | CHIP 2.7KOHM 1/16W |
| R477 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R478 | 9965 000 31313 | 61V0603101 | CHIPR 100 OHM+-5% 1/10W |
| R628 | 9965 000 31316 | 61V0603223 | CHIP 22KOHM 1/16W |
| RP201 | 9965 000 31344 | 61V1252208 | CHIP ARRAY 22 OHM 1/16W |
| RP202 | 9965 000 31344 | 61V1252208 | CHIP ARRAY 22 OHM 1/16W |
| U101 | 9965 000 31345 | 56T56325 | AIC1084-33PE |
| U102 | 9965 000 31346 | 56T56327 | AIC1117A-18PY SOT223 AI |
| U103 | 9965 000 31345 | 56T56325 | AIC1084-33PE |
| U104 | 9965 000 31347 | 56T56311 | SI-8050SD |
| U106 | 9965 000 31333 | 56T56612 | AO 4801 |
| U201 | 9965 000 31348 | 56T6401 | VPC3230D |
| U301 | 9965 000 31349 | 56T623501 | Z86229 |
| U401 | 9965 000 31350 | 56T562508 | NT68521A-XFG |
| U402 | 9965 000 31351 | 56T1125592EH1 | NT68F632AL/G |
| U403 | 9965 000 31352 | 56T4LVC14P | 74LVC14ADT |
| U405 | 9965 000 31353 | 56T113356A | 24LC16BT/SN SOIC-8PI |
| ZD101 | 9965 000 31354 | 93T60211 | SMB340 BY FULL POWER |
| ZD401 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD402 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD403 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD404 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD405 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD406 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD407 | 9965 000 31356 | 56T158501 | AZ431AZ-AE1 SOT23-3 |
| ZD408 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD409 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD410 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD411 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD412 | 9965 000 31355 | 93T39147 | TZMC 5V6 |

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|---|---|---|---|
| ZD413 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| ZD414 | 9965 000 31355 | 93T39147 | TZMC 5V6 |
| CN101 | 9965 000 31357 | 33T802712 | WAFER 2*6P 2.0MM R/A |
| CN102 | 9965 000 31358 | 88T3041CE | DC JACK 3PIN |
| CN103 | 9965 000 31359 | 88T78132C | RCA JACK |
| CN104 | 9965 000 31360 | 88T1006TN | MINI PIN 4P |
| CN107 | 9965 000 31357 | 33T802712 | WAFER 2*6P 2.0MM R/A |
| CN111 | 9965 000 31361 | 33T802724BH | WAFER&PLUG |
| CN112 | 9965 000 31362 | 88T35315FH | D-SUB 15PIN |
| CN113 | 9965 000 31363 | 33T802420CH | WAFER |
| FB101 | 9965 000 31364 | 71T5528 | FERRITE BEAD 7.62*5.08* |
| X201 | 9965 000 31365 | 93T2265BJ | 20.250 AE13F-BK4 |
| X401 | 9965 000 31366 | 93T2251BJ | NXS12.000AC30F-BT-2 |
| D401 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| D402 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| D403 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| D404 | 9965 000 31283 | 93T6433P | BAV99 |
| D405 | 9965 000 31283 | 93T6433P | BAV99 |
| D406 | 9965 000 31283 | 93T6433P | BAV99 |
| FB102 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB103 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB108 | 9965 000 31279 | 61V12060004 | 0 OHM 4A 1/4W |
| FB109 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB301 | 9965 000 31304 | 71T56Z601 | CHIP BEAD 600 OHM |
| FB401 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB402 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB403 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB404 | 9965 000 31367 | 71T57G601 | BEAD 1206 600 OHM |
| FB405 | 9965 000 31119 | 61V0805000 | CHIP 0OHM 1/10W |
| FB406 | 9965 000 31119 | 61V0805000 | CHIP 0OHM 1/10W |
| FB407 | 9965 000 31119 | 61V0805000 | CHIP 0OHM 1/10W |

## Power Board

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| Location / Item / Position No | Philips P/N | Vendor P/N | Description |
|---|---|---|---|
| BD901 | 9965 000 31068 | 93T50460502 | KBP206G |
| CN901 | 9965 000 31069 | 87T50110 | AC SOCKET |
| F901 | 9965 000 31070 | 84T7H200SL | 250V/2A LIHEL FUSE |
| GND1 | #N/A | 9T60021 | PIN |
| Q901 | 9965 000 31071 | 57T7244 | 2SK2996 |
| J908 | #N/A | 95T9023 | TIN COATED |
| L901 | 9965 000 31072 | 73V17426T1G | LINE LILT 0.45MM |
| L902 | 9965 000 31073 | 73T25391S | CHOKE COIL |
| LED1 | 9965 000 31074 | 81T232P | LED |
| T901 | 9965 000 31075 | 80V6003TF | SRW28EC-T40HO17 |
| C909 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| C910 | 9965 000 31077 | 65T120610231 | 1000PF 50V NPO 120 +-5% |
| C911 | 9965 000 31078 | 65T060315232 | CHIP 1500PF 50V X7R |
| C912 | 9965 000 31079 | 65T080510512 | 1UF +-10% 6V X7R |
| C913 | 9965 000 31080 | 65T060333131 | CHIP 330PF 50V NPO |
| C914 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C917 | 9965 000 31082 | 65T080522131 | 220PF 50V NPO |
| C924 | 9965 000 31371 | 65T080510427 | CHIP CAP 1UF 25V Y5V |
| C926 | 9965 000 31083 | 65T080547427 | CHIP 0.47UF 25V Y5V |
| C928 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| C929 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| C930 | 9965 000 31084 | 65T080533427 | 0.33UF 1/5V |
| C900 | 9965 000 31085 | 65T306M4722B2 | Y1 4700PF +-20% 250VAC |
| C901 | 9965 000 31086 | 63T107K334U | MPX 0.33/275VAC/+-10% |
| C902 | 9965 000 31087 | 65T305M1022EM | Y2 1000PF +-20% 250VAC |
| C903 | 9965 000 31087 | 65T305M1022EM | Y2 1000PF +-20% 250VAC |
| C904 | 9965 000 31088 | 67T305S10115K | 100UF +-20% 450V |
| C905 | 9965 000 31089 | 65T1K1521T6052 | 1.5nF /1K Y5P+-10% |
| C906 | 9965 000 31090 | 67T3052207T | 22uf 50v |
| C908 | 9965 000 31091 | 67T3051007T | 10UF |
| C915 | 9965 000 31090 | 67T3052207T | 22uf 50v |
| C916 | 9965 000 31092 | 65T306M3322F2 | 3300PF +-20% 400VAC Y1 |
| C920 | #N/A | 65T517K6812T6921 | 680PF 500 +-10% 25P |
| C921 | 9965 000 31094 | 67T215C1023H | EC LESR 1000UF16V HERME |
| C922 | 9965 000 31094 | 67T215C1023H | EC LESR 1000UF16V HERME |
| IC901 | 9965 000 31095 | 56T37927 | FA13843N |
| IC902 | 9965 000 31096 | 56T1584T | H431BA |

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|---|---|---|---|
| IC903 | 9965 000 31097 | 56T1393A | PC123Y22FZOF |
| IC905 | 9965 000 31096 | 56T1584T | H431BA |
| D901 | 9965 000 31098 | 93T6026T52T | FR107 |
| D902 | 9965 000 31099 | 93T6038T52T | FR103 |
| D904 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| D905 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| D906 | 9965 000 31100 | 93T6432V | LL4148-GSO8 SMD BY VISH |
| D911 | 9965 000 31101 | 93T60226 | DIODE |
| Q902 | 9965 000 31102 | 57T4176 | PMBS3906/PHILIPS-SMT |
| Q903 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| R900 | 9965 000 31104 | 61V0805112 | 1.1K OHM 1/8W |
| R901 | 9965 000 31105 | 61V1206684 | CHIP 680K OHM 1/8W |
| R902 | 9965 000 31105 | 61V1206684 | CHIP 680K OHM 1/8W |
| R903 | 9965 000 31106 | 61V1206514 | CHIP 510K OHM 1/8W |
| R904 | 9965 000 31106 | 61V1206514 | CHIP 510K OHM 1/8W |
| R905 | 9965 000 31107 | 61V1206304 | CHIP 300K OHM 1/4W |
| R906 | 9965 000 31107 | 61V1206304 | CHIP 300K OHM 1/4W |
| R907 | 9965 000 31107 | 61V1206304 | CHIP 300K OHM 1/4W |
| R908 | 9965 000 31107 | 61V1206304 | CHIP 300K OHM 1/4W |
| R909 | 9965 000 31107 | 61V1206304 | CHIP 300K OHM 1/4W |
| R910 | 9965 000 31107 | 61V1206304 | CHIP 300K OHM 1/4W |
| R911 | 9965 000 31108 | 61T152M10457F | MOFR 100K +-5% 2W |
| R912 | 9965 000 31109 | 61V1206100 | CHIP 10 OHM 1/8W |
| R913 | 9965 000 31110 | 61V0805104 | CHIPR 100K OHM+-5% 1/8W |
| R914 | 9965 000 31111 | 61V0805204 | 200K OHM 1/8W |
| R915 | 9965 000 31112 | 61V0805101 | CHIPR 100 OHM +-5% 1/8W |
| R917 | 9965 000 31113 | 61V0805473 | CHIPR 47K OHM +-5% 1/8W |
| R918 | 9965 000 31114 | 61V0805133 | CHIPR 13KOHM +-5% 1/8W |
| R919 | 9965 000 31115 | 61V0805203 | CHIPR 20KOHM +-5% 1/8W |
| R920 | 9965 000 31113 | 61V0805473 | CHIPR 47K OHM +-5% 1/8W |
| R921 | 9965 000 31116 | 61V0805303 | CHIP 30K OHM 1/8W |
| R922 | 9965 000 31117 | 61V0805114 | CHIP RES 110K 1/8W |
| R923 | 9965 000 31109 | 61V1206100 | CHIP 10 OHM 1/8W |
| R924 | 9965 000 31118 | 61V0805472 | CHIRP 4.7K OHM +-5% 1/8 |
| R925 | 9965 000 31119 | 61V0805000 | CHIP 0OHM 1/10W |
| R926 | 9965 000 31120 | 61V1206101 | CHIP 100 OHM 5% 1/4W |
| R927 | 9965 000 31121 | 61V0805103 | CHIP 10K OHM 1/10W |
| R928 | 9965 000 31122 | 61V0603102 | CHIPR 1K OHM+-5% 1/10W |
| R929 | 9965 000 31123 | 61V0805821 | 820 1/8W |
| R930 | 9965 000 31124 | 61T2J47859B | WIRE WOUN 0.47 OHM ZW |

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|---|---|---|---|
| R931 | 9965 000 31109 | 61V1206100 | CHIP 10 OHM 1/8W |
| R932 | 9965 000 31109 | 61V1206100 | CHIP 10 OHM 1/8W |
| R933 | 9965 000 31125 | 61V1206472 | CHIP 4.7KOHM 5% 1/4W |
| R934 | 9965 000 31126 | 61V1206471 | CHIP 470OHM 1/8W |
| R935 | 9965 000 31127 | 61V0805102 | CHIPR 1K OHM +-5% 1/8W |
| R936 | 9965 000 31128 | 61V06039311F | CHIPR 9.31KOHM+-1% 1/10 |
| R937 | 9965 000 31129 | 61V06032431F | CHIP 2.43K OHM 1/16W 1% |
| R938 | 9965 000 31130 | 65T080510232 | CHIP 1000P 50VX7R 0805 |
| R939 | 9965 000 31110 | 61V0805104 | CHIPR 100K OHM+-5% 1/8W |
| ZD901 | 9965 000 31131 | 93T39S15T | RLZ15B |
| NR901 | 9965 000 31132 | 61T58080WT | 8 OHM NCT |
| FB901 | 9965 000 31133 | 71T5519T | FERRITE BEAD D9X3. 5X0. |
| J907 | 9965 000 31134 | 61T60220252T | CFR 2K C 5% 1/6W |
| L901 | 9965 000 31135 | 6T31502 | 1.5MM RIVET |
| T901 | 9965 000 31135 | 6T31502 | 1.5MM RIVET |
| | 9965 000 31136 | 33T60071 | LENS |
| | #N/A | 40T1545011 | HI-POT GND LABEL FOR MO |
| | #N/A | 40T416B6152C | ID LABEL |
| | 9965 000 31137 | W33T4477BT | TOP COVER for Adaptor |
| | 9965 000 31138 | W33T4478BT | BOTTOM COVER for Adaptor |
| | #N/A | 96T296 | SHRINK TUBE UL/CSA |
| | #N/A | 90T396502Q | HEAT SINK |
| | #N/A | M1T17307128 | SCREW |
| | #N/A | 90T396503D | HEAT SINK |
| | #N/A | M1T17306128 | SCREW M3X6 |
| | #N/A | 96T296 | SHRINK TUBE UL/CSA |

## Inverter Board

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| Location / Item / Position No | Philips P/N | Vendor P/N | Description |
|---|---|---|---|
| | #N/A | 40T45762412B | CBPC LABEL |
| | #N/A | 52T602511575 | MYLAR |
| C1 | 9965 000 31269 | 67T215B2214HT | 220UF |
| C2 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| C3 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| C4 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| C5 | 9965 000 31270 | 65T080510322 | CHIP 0.01UF 25V X7R 080 |
| C6 | 9965 000 31271 | 65T080510527 | CHIP 1UF 25V Y5V 0805 |
| C7 | 9965 000 31090 | 67T3052207T | 22uf 50v |
| C8 | 9965 000 31271 | 65T080510527 | CHIP 1UF 25V Y5V 0805 |
| C9 | 9965 000 31272 | 64T179J2241AT | MKT CAP 0.22UF 100V |
| C10 | 9965 000 31273 | 65V3J2206ET | 22PF 5% 3KV TDK |
| C11 | 9965 000 31273 | 65V3J2206ET | 22PF 5% 3KV TDK |
| C12 | 9965 000 31076 | 65T080510422 | 0.1UF +-10% 25V X7R 080 |
| CON1 | 9965 000 31274 | 33T38025H | WAFER 5P RIGHT ANELE PI |
| CON2 | 9965 000 31275 | 33T80202DU | WAFER |
| CON3 | 9965 000 31275 | 33T80202DU | WAFER |
| U1 | 9965 000 31276 | 56T6082 | TL5001CDR |
| L1 | 9965 000 31277 | 73T25392Y | CHOKE COIL |
| L2 | 9965 000 31278 | 73T17430YSA | CHOKE COIL |
| F1 | 9965 000 31279 | 61V12060004 | 0 OHM 4A 1/4W |
| PT1 | 9965 000 31280 | 80VL15T7HG | X'FRM |
| D1 | 9965 000 31281 | 93T30042 | SR34 PAN JIT |
| D2 | 9965 000 31282 | 93T39S3T | BZT52-C11 |
| D3 | 9965 000 31283 | 93T6433P | BAV99 |
| Q1 | 9965 000 31284 | 57T7605 | DTC144WKA BY FOHM SMT |
| Q2 | 9965 000 31285 | 57T7604 | DTA144WKA BY ROHM SMT |
| Q3 | 9965 000 31286 | 57T7633 | AO4411L SO-8 BY AOS SMT |
| Q4 | 9965 000 31103 | 57T4174 | CHIP PMBS3904 BY PHILIP |
| Q5 | 9965 000 31102 | 57T4176 | PMBS3906/PHILIPS-SMT |
| Q6 | 9965 000 31287 | 57T7606 | DTC143EKA SMT (23) |
| Q7 | 9965 000 31288 | 57T7612 | 2SC5706-TL-SMT |
| Q8 | 9965 000 31288 | 57T7612 | 2SC5706-TL-SMT |
| R1 | 9965 000 31289 | 61V0603303 | CHIP 30K OHM 5% 1/10W |
| R2 | 9965 000 31290 | 61V0603512 | CHIP 5.1K OHM 1/10W |
| R3 | 9965 000 31291 | 61V0603222 | CHIPR 2.2K OHM+-5% 1/10 |
| R4 | 9965 000 31292 | 61V0603000 | CHIPR 0OHM +-5% 1/10W |

| | | | |
|---|---|---|---|
| R5 | 9965 000 31293 | 61V0603513 | CHIP 51K OHM 1/10W |
| R6 | 9965 000 31294 | 61V0603333 | CHIP 33K OHM 1/10W |
| R8 | 9965 000 31295 | 61V0603683 | CHIP 68K OHM 1/10W |
| R9 | 9965 000 31296 | 61V0603472 | CHIP 1.7K OHM 1/16W |
| R10 | 9965 000 31297 | 61V0603392 | CHIP 3.9K OHM 1/10W |
| R11 | 9965 000 31298 | 61V0603471 | CHIPR 470 OHM+-5% 1/10W |
| R12 | 9965 000 31295 | 61V0603683 | CHIP 68K OHM 1/10W |
| R13 | 9965 000 31299 | 61V1206202 | CHIP 2K 5% 1/4W |
| R14 | 9965 000 31299 | 61V1206202 | CHIP 2K 5% 1/4W |
| R15 | 9965 000 31299 | 61V1206202 | CHIP 2K 5% 1/4W |
| R16 | 9965 000 31299 | 61V1206202 | CHIP 2K 5% 1/4W |
| R17 | 9965 000 31300 | 61V0603911 | CHIP 910 OHM 1/10W |
| R18 | 9965 000 31300 | 61V0603911 | CHIP 910 OHM 1/10W |

## Key Board

Go to cover page

| Location / Item / Position No | Philips P/N | Vendor P/N | Description |
|---|---|---|---|
| CN101 | 9965 000 31264 | 33T80348S | 8PIN 1MM |
| CN102 | 9965 000 31265 | 33T80346S | 6PIN 1MM |
| R101 | 9965 000 31266 | 61V0805222 | CHIP 2.2KOHM 5% 0805 1/ |
| R102 | 9965 000 31267 | 61V0805512 | CHIP 5.1KOHM 1/8W |
| R103 | 9965 000 31266 | 61V0805222 | CHIP 2.2KOHM 5% 0805 1/ |
| R104 | 9965 000 31267 | 61V0805512 | CHIP 5.1KOHM 1/8W |
| SW102 | 9965 000 31268 | 77T6042CJ | TSDPA-2-T-NP |
| SW103 | 9965 000 31268 | 77T6042CJ | TSDPA-2-T-NP |
| SW104 | 9965 000 31268 | 77T6042CJ | TSDPA-2-T-NP |
| SW105 | 9965 000 31268 | 77T6042CJ | TSDPA-2-T-NP |
| SW106 | 9965 000 31268 | 77T6042CJ | TSDPA-2-T-NP |
| SW107 | 9965 000 31268 | 77T6042CJ | TSDPA-2-T-NP |

## Tuner Board

Go to cover page

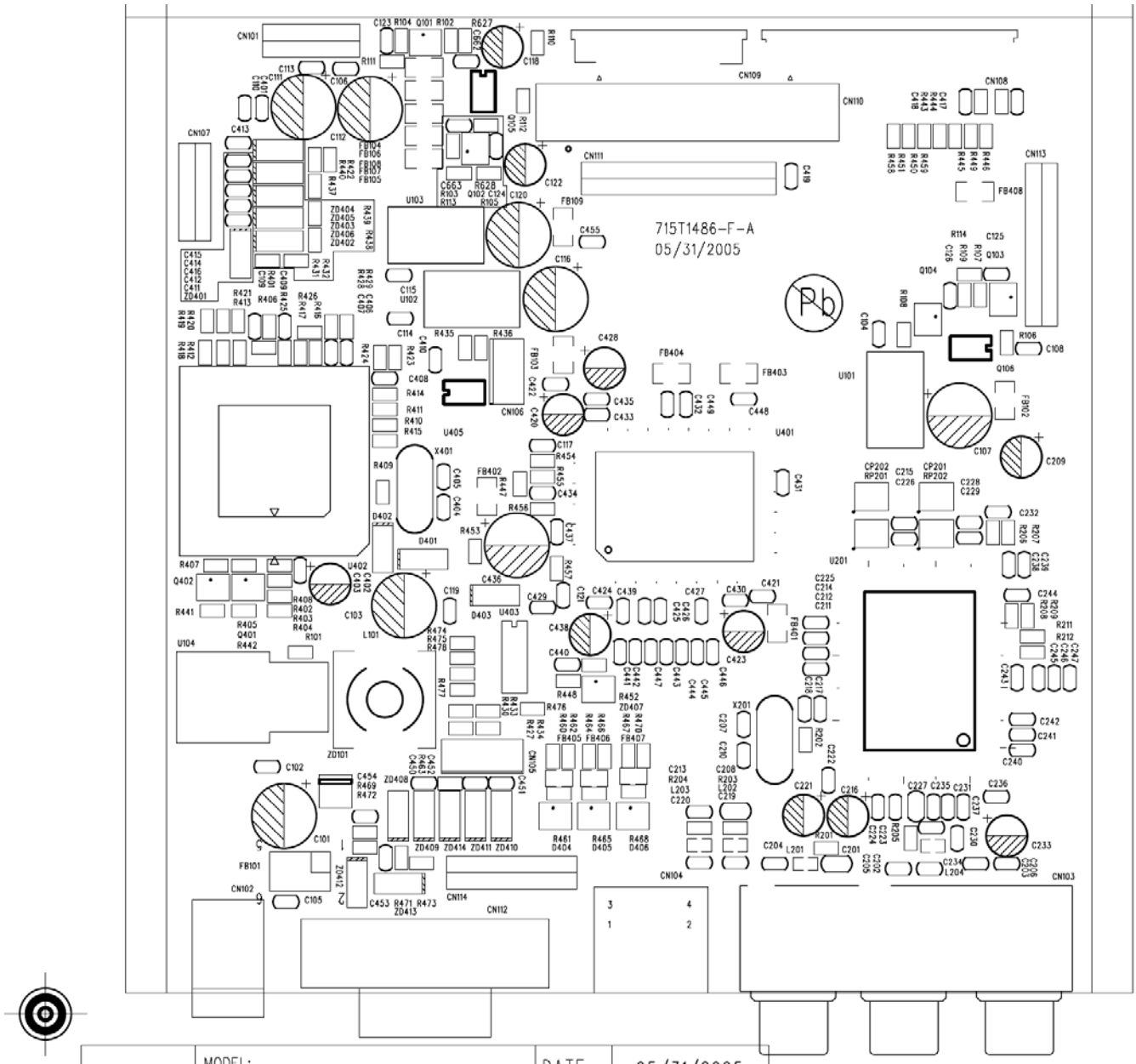
| Location / Item / Position No | Philips P/N | Vendor P/N | Description |
|---|---|---|---|
| | #N/A | 90T61192 | HEAT SINK |
| C601 | 9965 000 31248 | 65T060310332 | CHIP 0.01UF 50V X7R |
| C611 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C612 | 9965 000 31250 | 67T305V3313 | 330UF +-20% 16V |
| C614 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C615 | 9965 000 31251 | 67T405V1017P | 100UF 50V |
| C616 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C618 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C619 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C622 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C623 | 9965 000 31252 | 67T215B4713R | LOW E.S.R 470UF +/-20% |
| C624 | 9965 000 31252 | 67T215B4713R | LOW E.S.R 470UF +/-20% |
| C625 | 9965 000 31252 | 67T215B4713R | LOW E.S.R 470UF +/-20% |
| C626 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C627 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C628 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C629 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C630 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C631 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C632 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C633 | 9965 000 31254 | 65T060310131 | CHIP 100PF 50V NPO |
| C634 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C635 | 9965 000 31255 | 65T060322031 | CHIP 22PF 50V NPO |
| C636 | 9965 000 31256 | 65T060356031 | CHIP 56PF 50V NPO |
| C637 | 9965 000 31256 | 65T060356031 | CHIP 56PF 50V NPO |
| C638 | 9965 000 31251 | 67T405V1017P | 100UF 50V |
| C639 | 9965 000 31257 | 65T060347132 | CHIP 470PF 50V NPO |
| C640 | 9965 000 31078 | 65T060315232 | CHIP 1500PF 50V X7R |
| C641 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C642 | 9965 000 31258 | 67T405V1003P | 10UF 16V |
| C643 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C644 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C645 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C646 | 9965 000 31080 | 65T060333131 | CHIP 330PF 50V NPO |
| C647 | 9965 000 31080 | 65T060333131 | CHIP 330PF 50V NPO |
| C648 | 9965 000 31258 | 67T405V1003P | 10UF 16V |
| C649 | 9965 000 31078 | 65T060315232 | CHIP 1500PF 50V X7R |

| | | | |
|---|---|---|---|
| C650 | 9965 000 31259 | 65T060322131 | CHIP 220PF 50V NPO |
| C651 | 9965 000 31257 | 65T060347132 | CHIP 470PF 50V NPO |
| C652 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C653 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C654 | 9965 000 31260 | 67T405V3397P | 3.3UF 50V |
| C656 | 9965 000 31258 | 67T405V1003P | 10UF 16V |
| C657 | 9965 000 31258 | 67T405V1003P | 10UF 16V |
| C658 | 9965 000 31078 | 65T060315232 | CHIP 1500PF 50V X7R |
| C659 | 9965 000 31257 | 65T060347132 | CHIP 470PF 50V NPO |
| C660 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C661 | 9965 000 31081 | 65T060310232 | CHIP 1000PF 50V X7R |
| C662 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C663 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C664 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C666 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C668 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C669 | 9965 000 31251 | 67T405V1017P | 100UF 50V |
| C670 | 9965 000 31249 | 65T060310432 | CHIP 0.1UF 50V X7R |
| C671 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| C672 | 9965 000 31253 | 65T060310517 | CHIP 1UF 16V Y5V |
| CN115 | #N/A | 33T801720AH | PIN HEADER 20P 2.0MM |
| CN117 | #N/A | 88T30211K | PHONE JACK |
| R630 | 9965 000 31261 | 61T153M39959 | 3.9 OHM+-5% 3W |
| R631 | 9965 000 31261 | 61T153M39959 | 3.9 OHM+-5% 3W |
| R632 | 9965 000 31261 | 61T153M39959 | 3.9 OHM+-5% 3W |
| R633 | 9965 000 31261 | 61T153M39959 | 3.9 OHM+-5% 3W |
| TU100 | 9965 000 31262 | 94VNTSCM1P | FQ1236/FH-5 |
| X601 | 9965 000 31263 | 93T2268BJ | 18.432MHZ |

# 10. PCB Layout

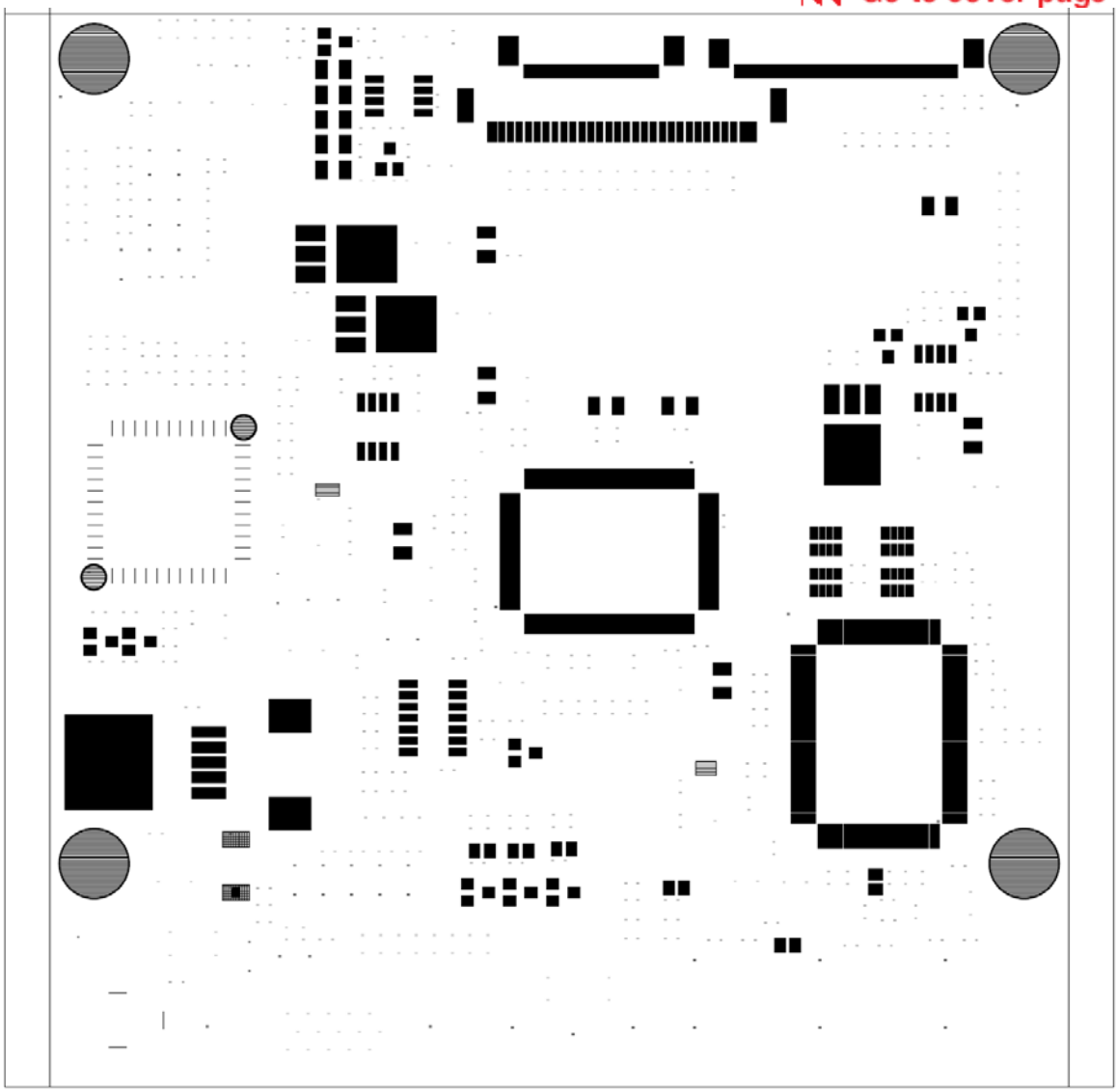
Go to cover page

## 10.1. Main Board



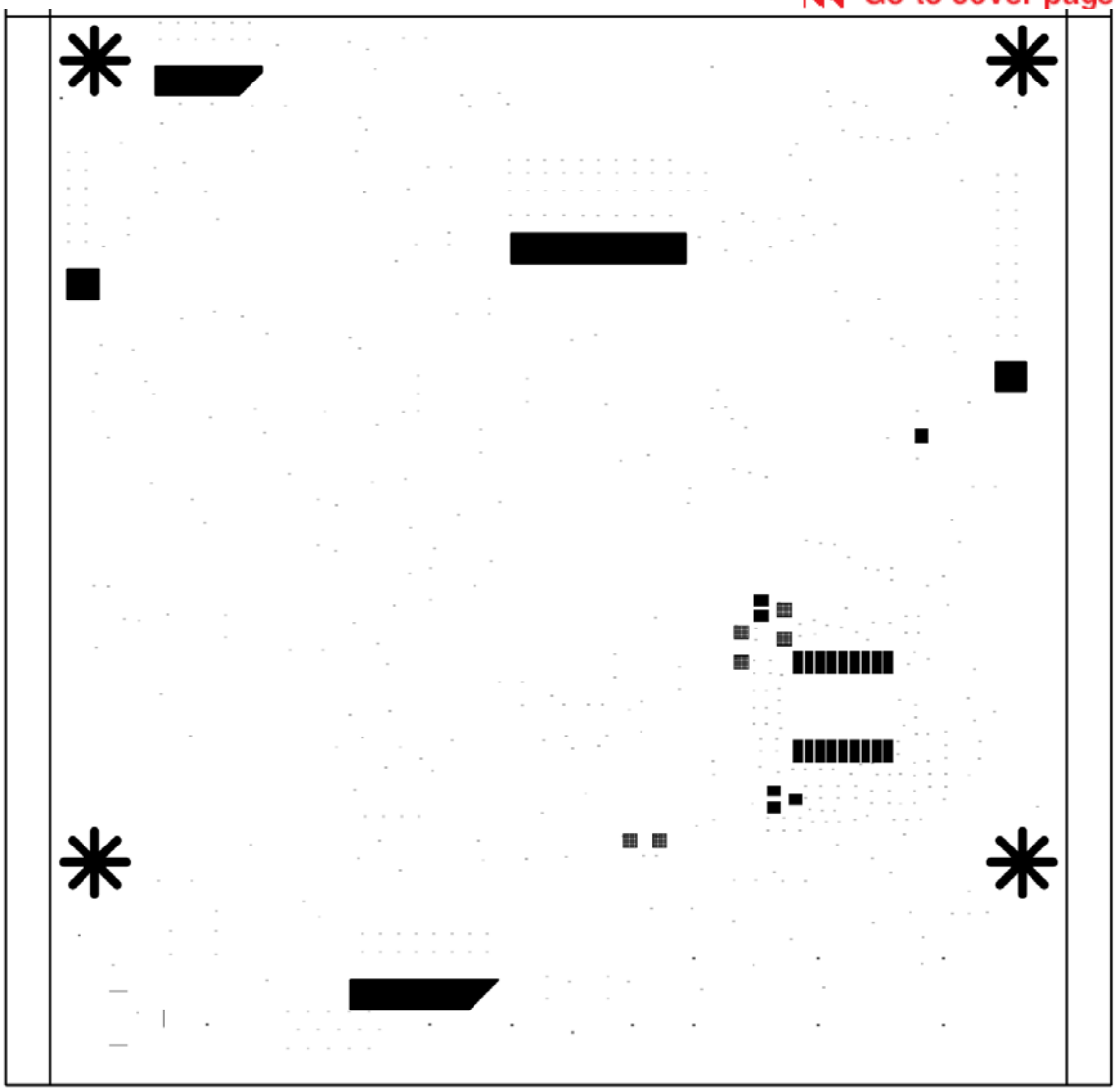

| | | | |
|---|---|---|---|
| HS | MODEL: 715T1486-F-A | DATE | 05/31/2005 |
| | | F/N | 715T1486-F-A |
| | SILKSCREEN-TOP | LAYER | 2 |
| | Tel: (03)5630585 ; Fax: (03)5630587 | LAYOUT | cheng |

Go to cover page



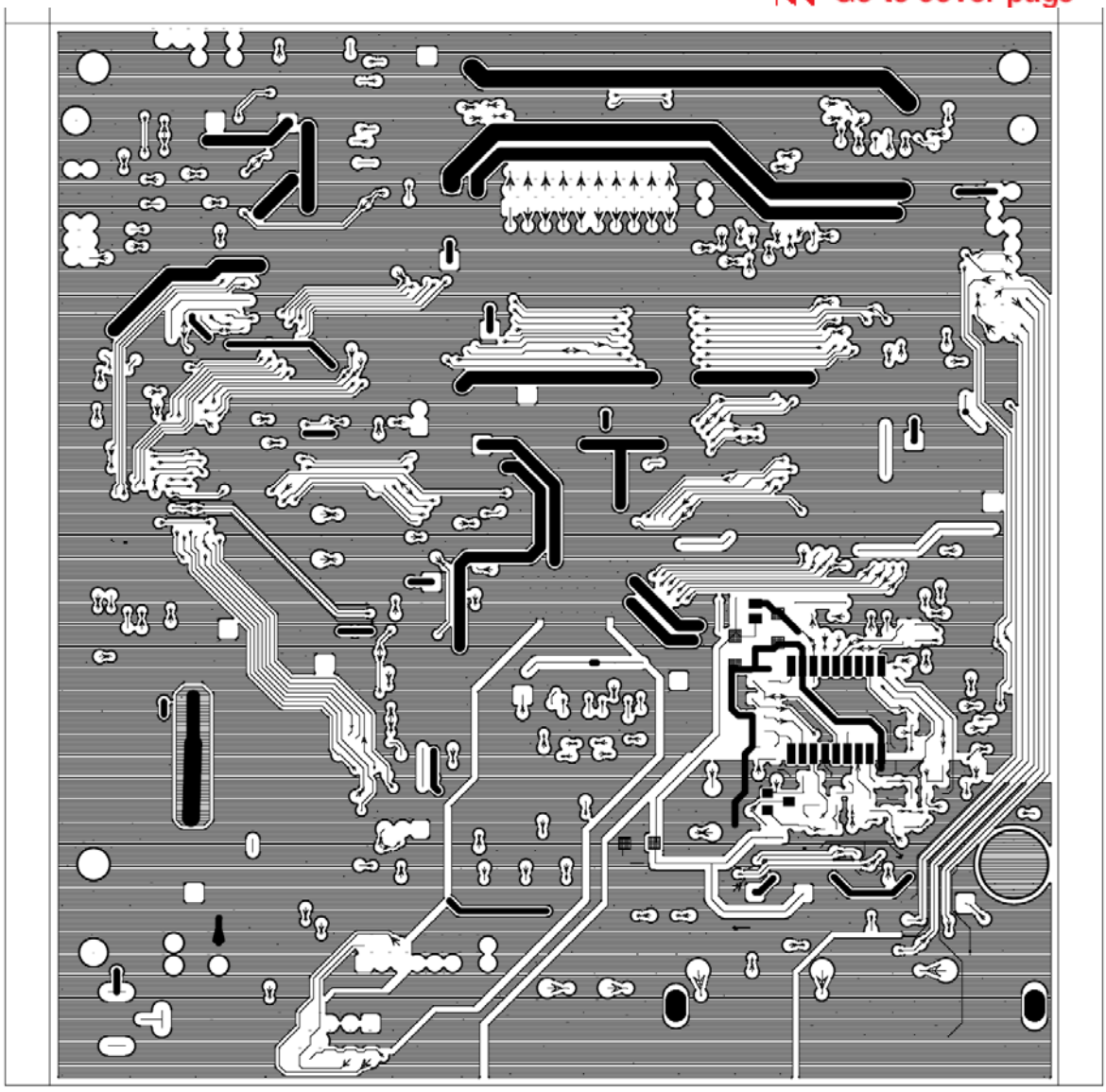
| | | | |
|---|---|---|---|
| HS | MODEL: 715T1486-F-A | DATE | 05/31/2005 |
| | | F/N | 715T1486-F-A |
| | MASK-TOP | LAYER | 2 |
| | Tel: (03)5630585 ; Fax: (03)5630587 | LAYOUT | cheng |

Go to cover page



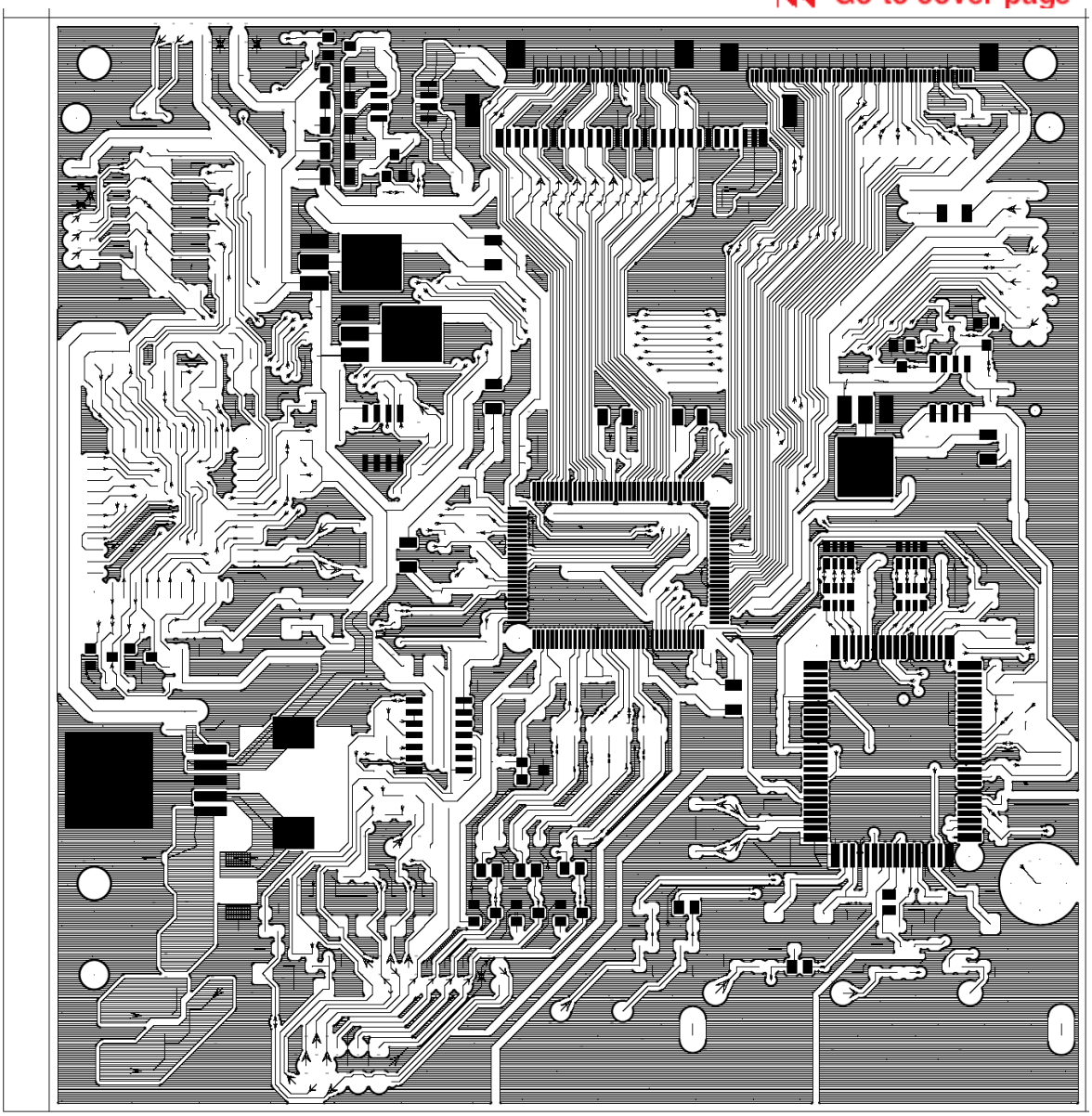
| | | | |
|---|---|---|---|
| HS | MODEL: 715T1486-F-A | DATE | 05/31/2005 |
| | | F/N | 715T1486-F-A |
| | MASK-BOTTOM | LAYER | 2 |
| | Tel: (03)5630585 ; Fax: (03)5630587 | LAYOUT | cheng |

Go to cover page



| | | | |
|---|---|---|---|
| HS | MODEL: 715T1486-F-A | DATE | 05/31/2005 |
| | | F/N | 715T1486-F-A |
| | BOTTOM SIDE | LAYER | 2 |
| | Tel: (03)5630585 ; Fax: (03)5630587 | LAYOUT | cheng |

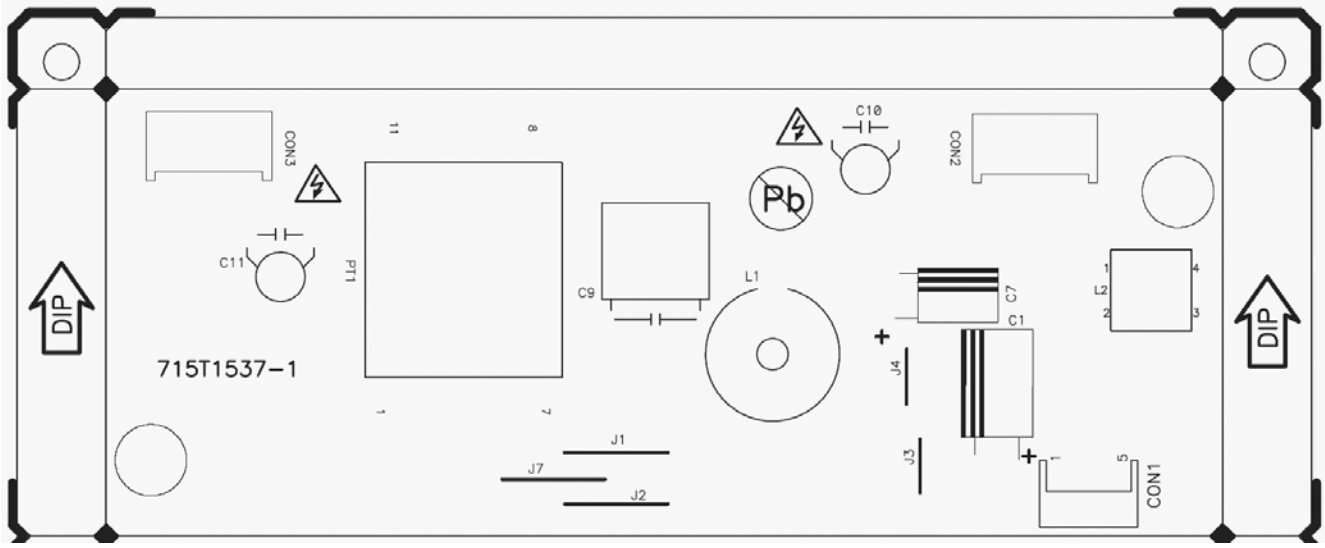
Go to cover page



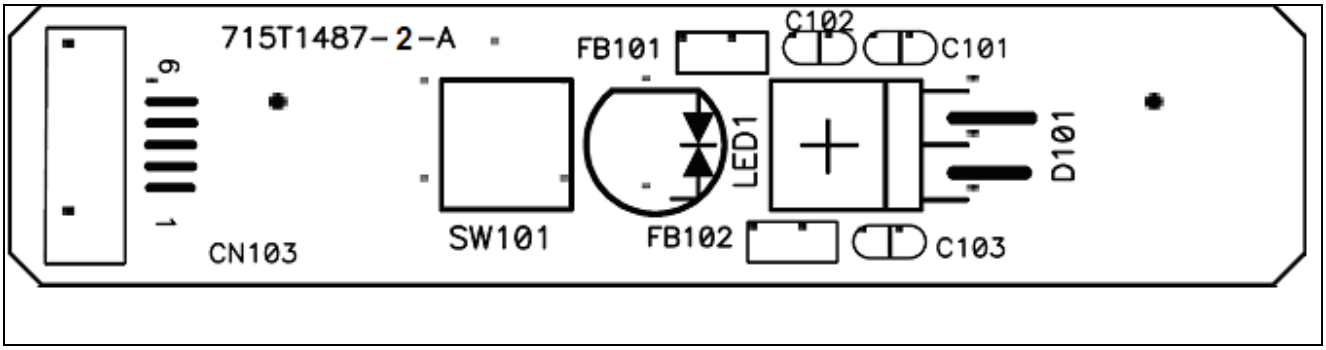
| | | | |
|---|---|---|---|
| HS | MODEL: 715T1486-F-A | DATE | 05/31/2005 |
| | | F/N | 715T1486-F-A |
| | TOP SIDE | LAYER | 2 |
| | Tel: (03)5630585 ; Fax: (03)5630587 | LAYOUT | cheng |

## 10.2. Power Board

Go to cover page

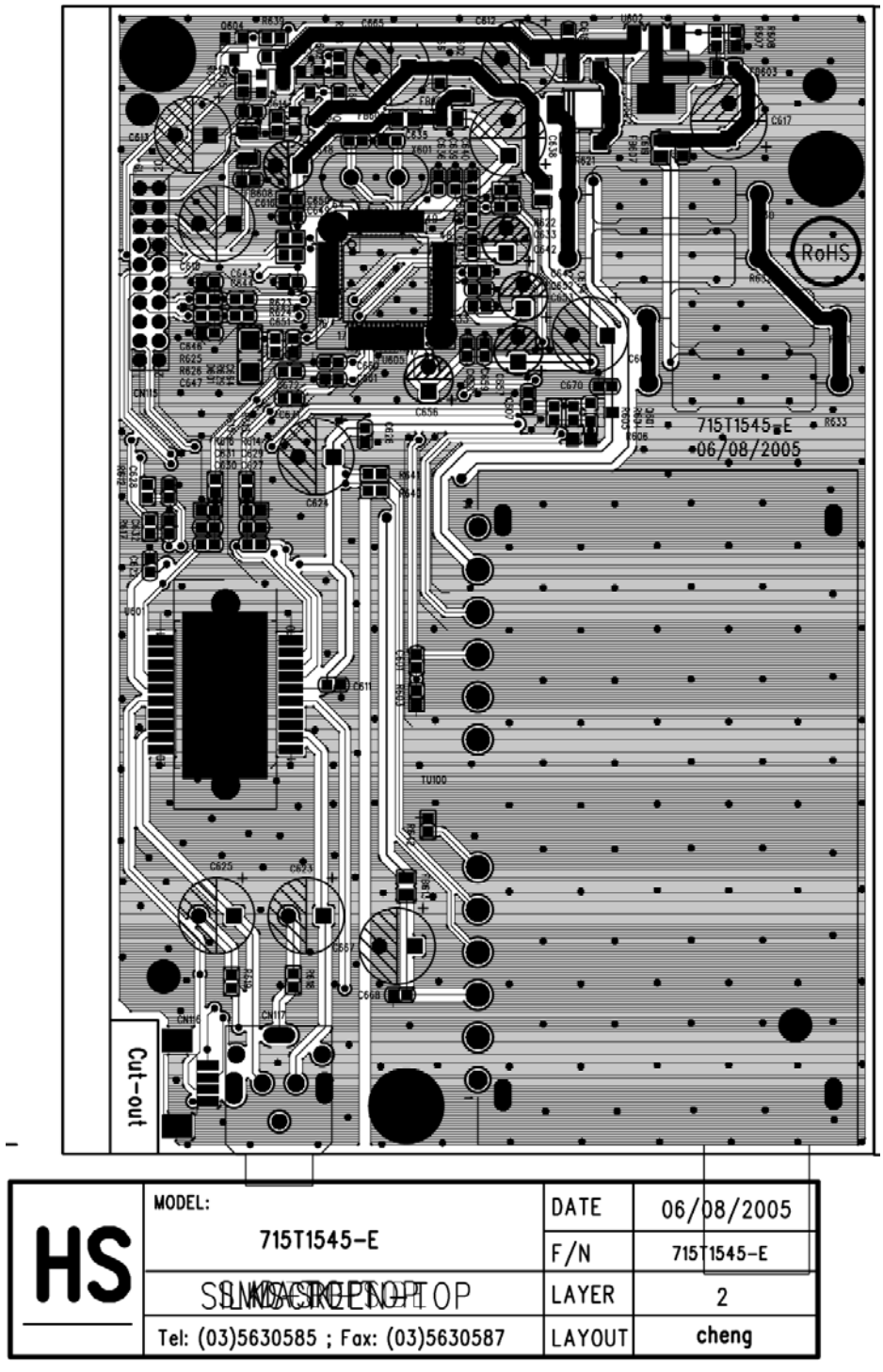



## 10.3. IR Board



## 10.4.Tuner Board

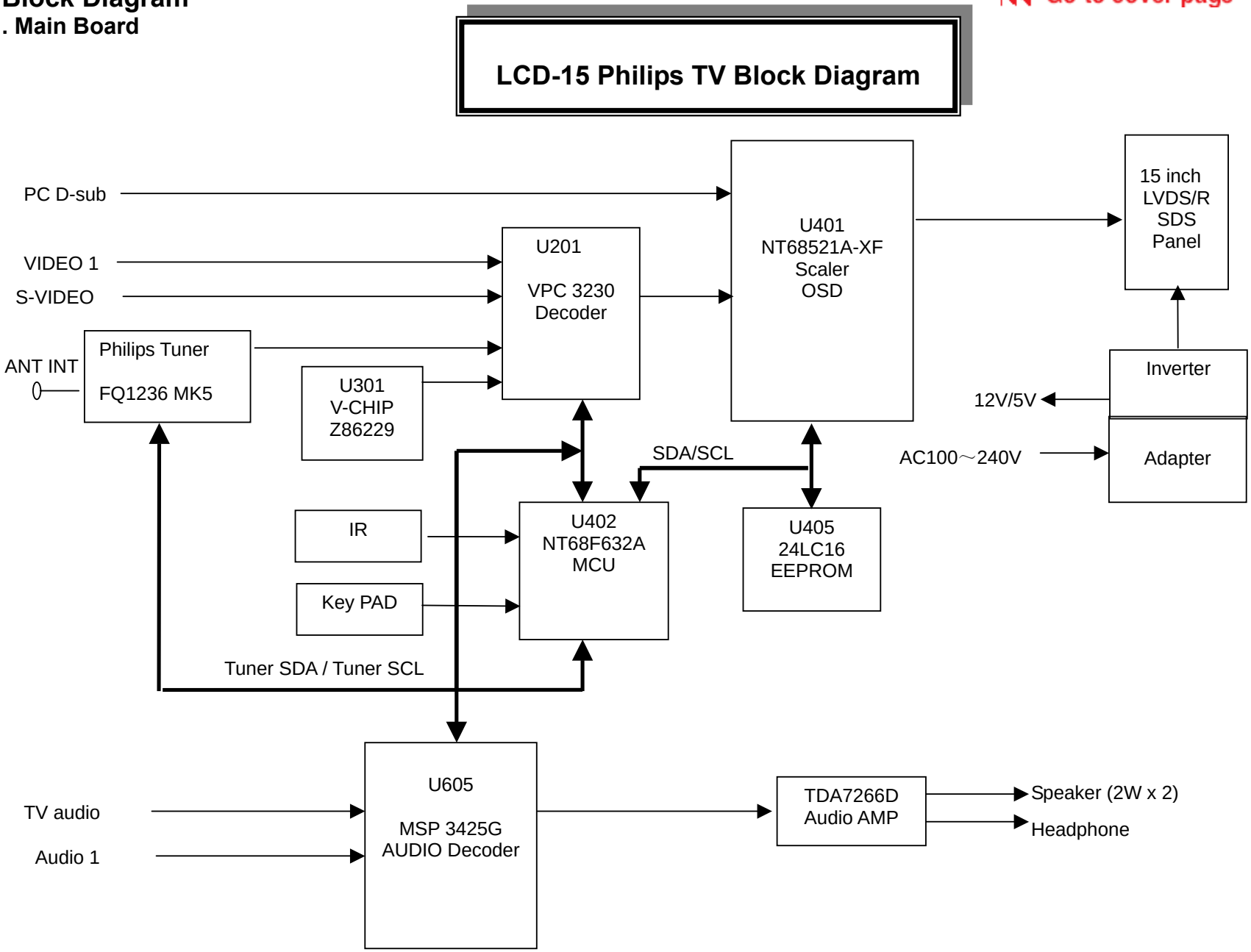
Go to cover page



# 11. Block Diagram

## 11.1. Main Board

Go to cover page



## 11.2 Power Board

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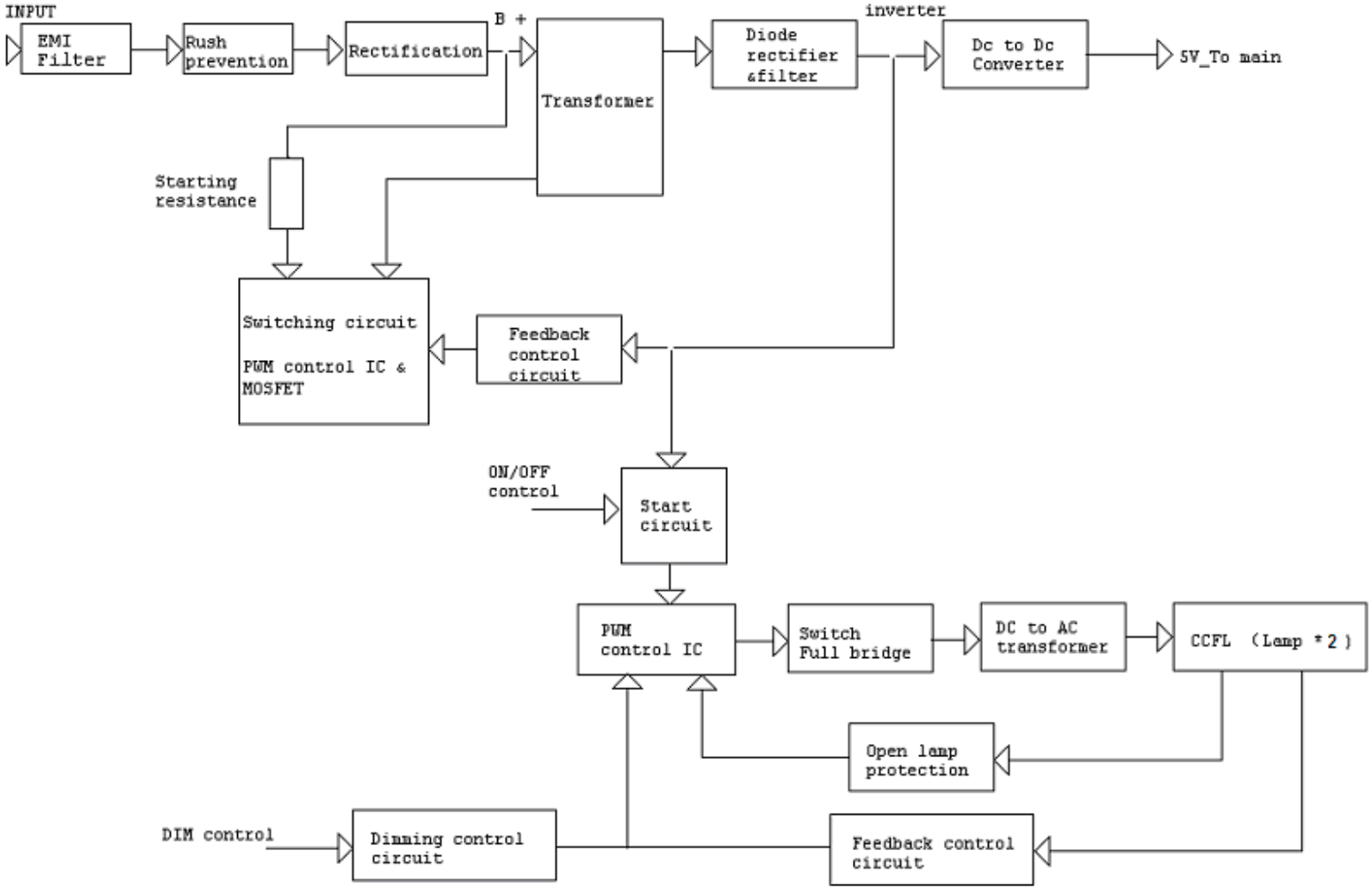
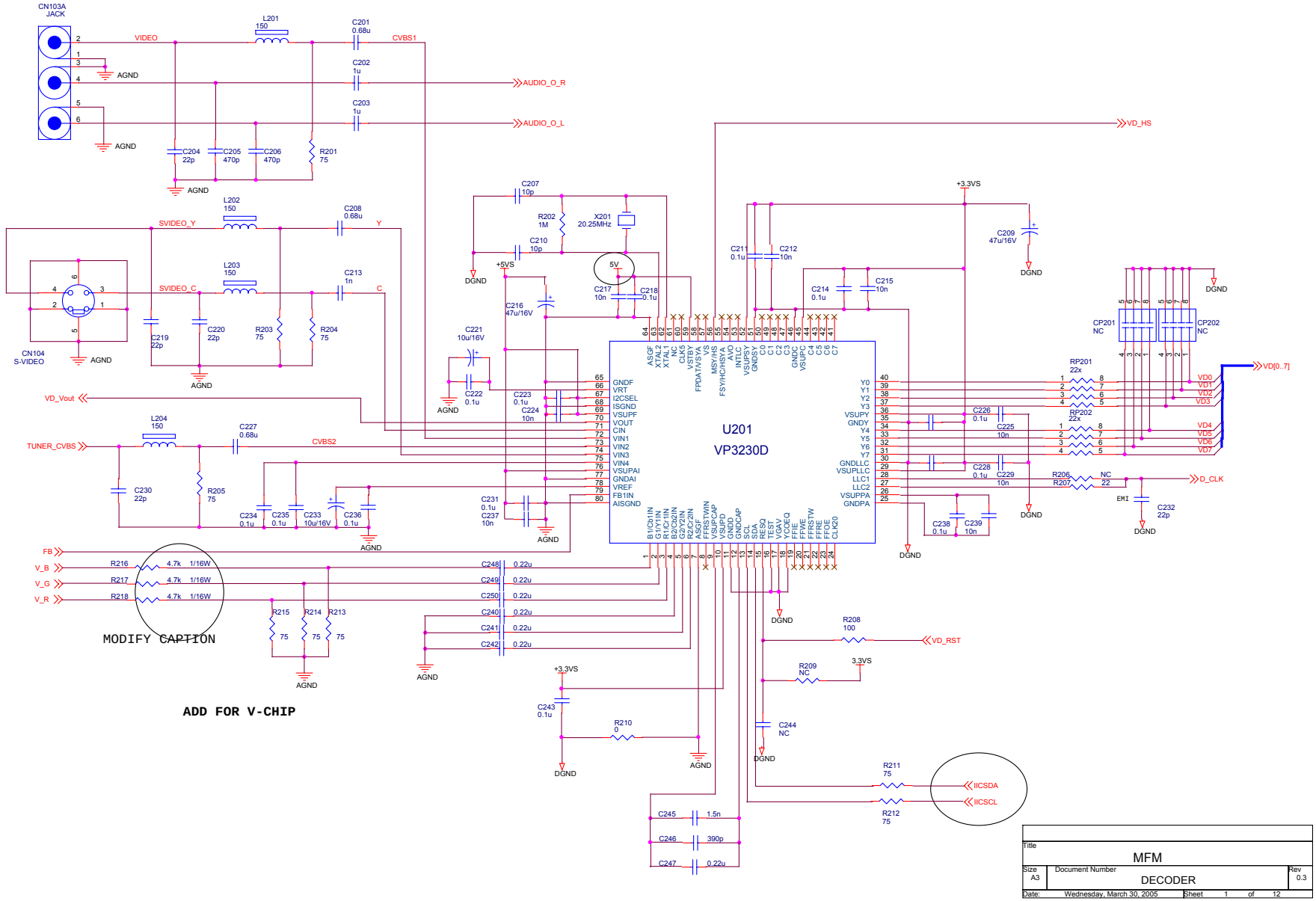


# 12. Schematic Diagram

## 12.1. Main Board

Go to cover page




| | | |
|---|---|---|
| Title | MFM | |
| Size A3 | Document Number DECODER | Rev 0.3 |
| Date: Wednesday, March 30, 2005 | Sheet 1 of 12 | |

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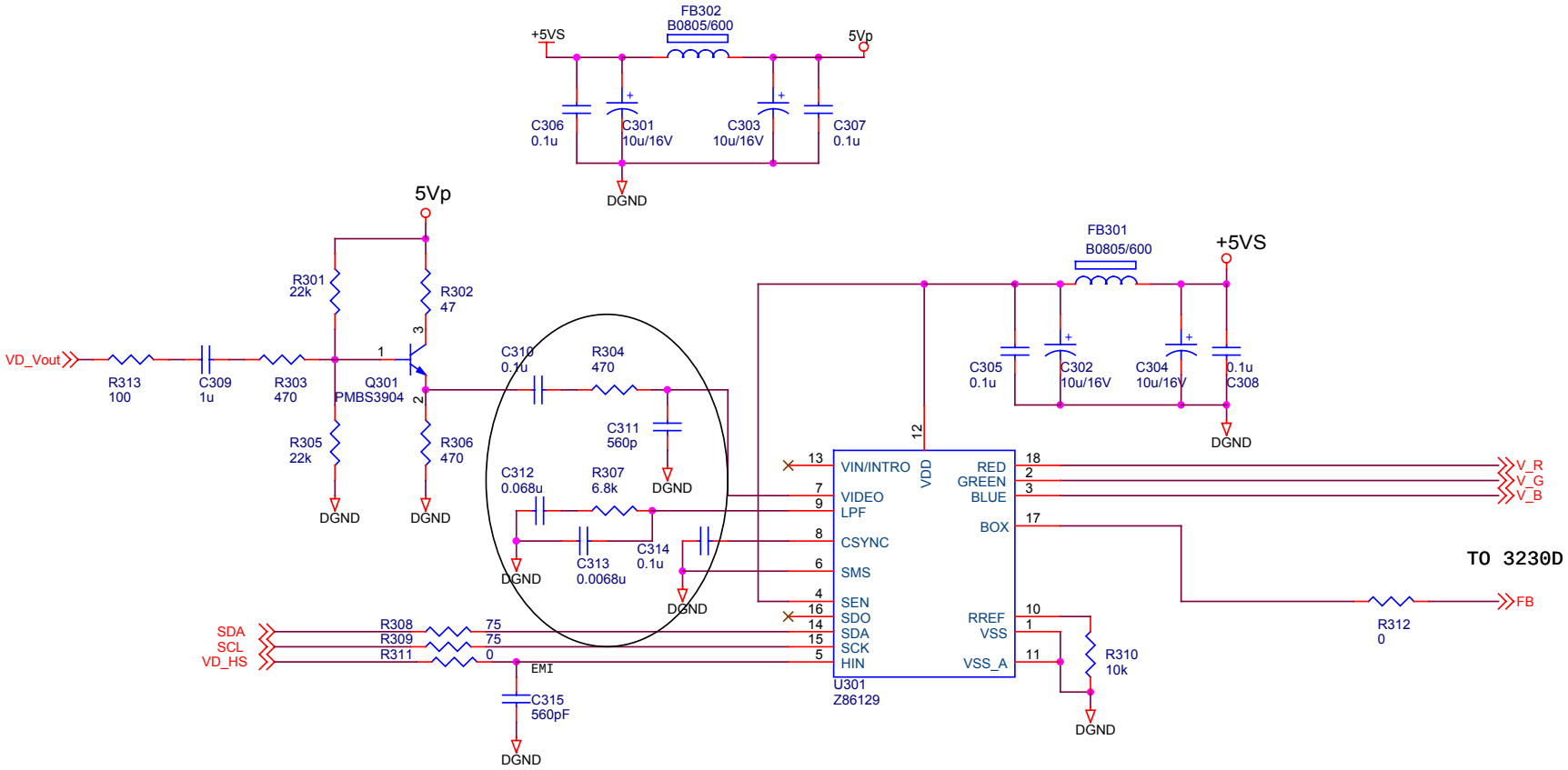


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| Date: Wednesday, March 30, 2005 | Sheet 2 of 12 | |



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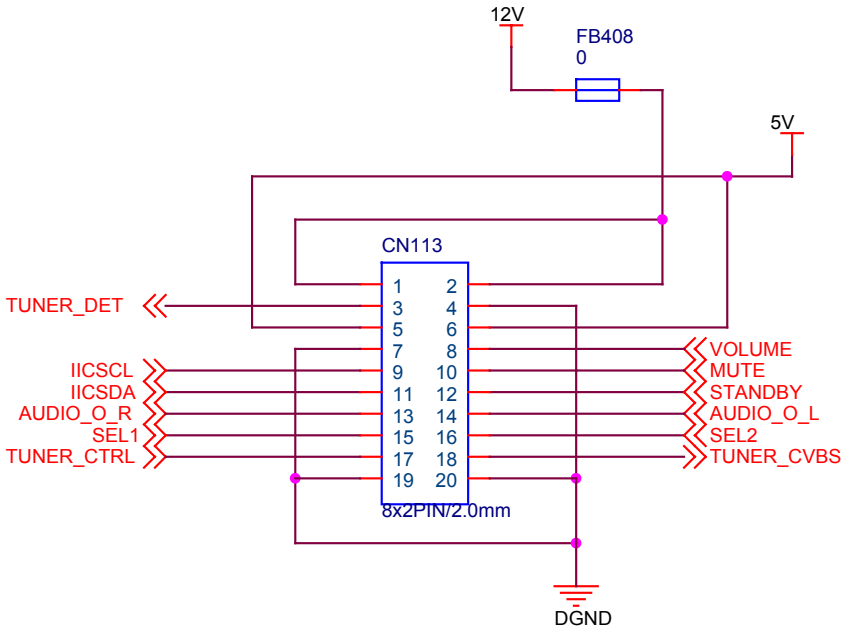


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| Size A4 | Document Number CONVERSION | | Rev 0.2 |
| Date: Wednesday, March 30, 2005 | | Sheet 3 of 12 | |



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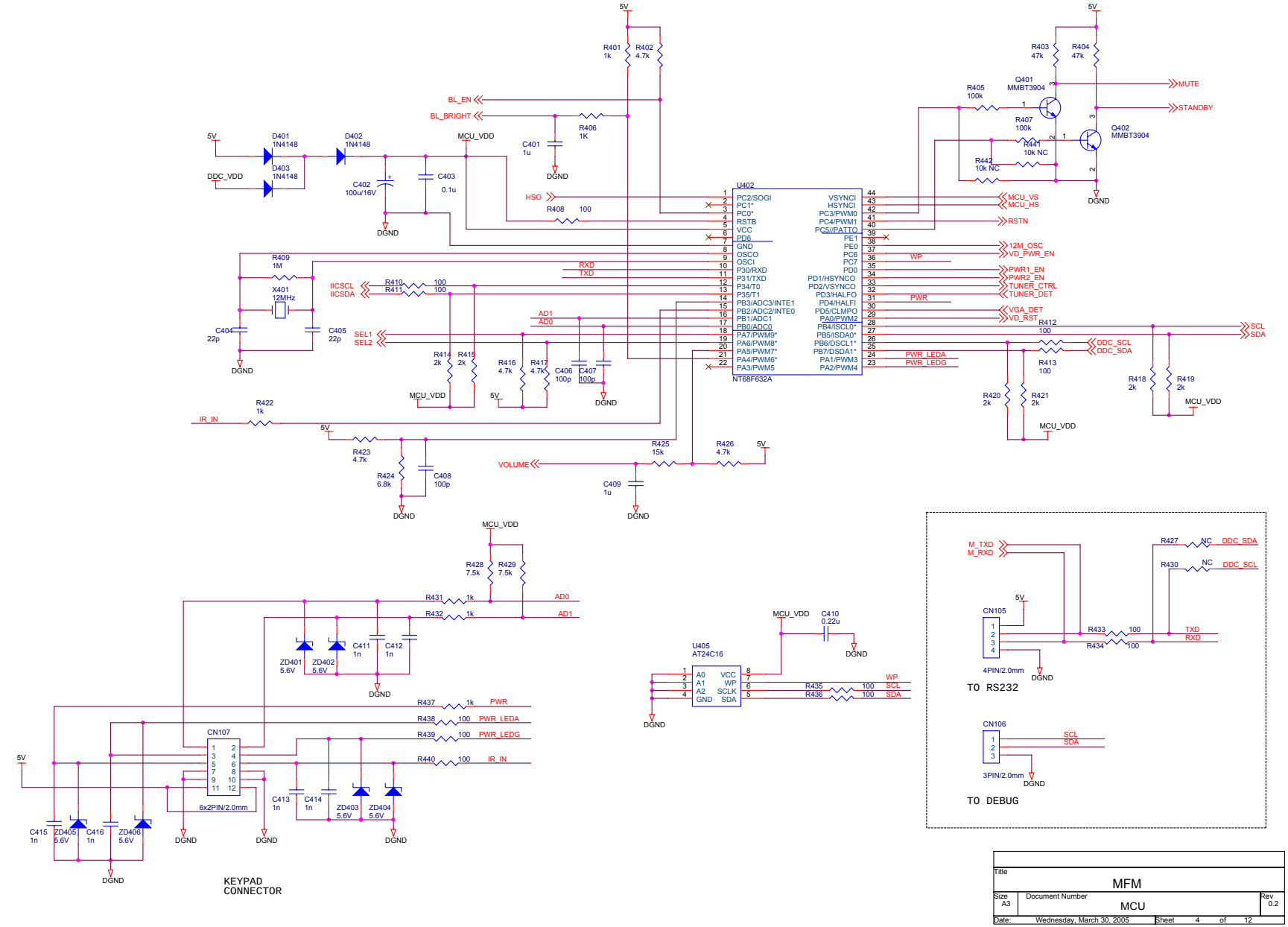


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| Date: Wednesday, March 30, 2005 | Sheet 4 of 12 | |

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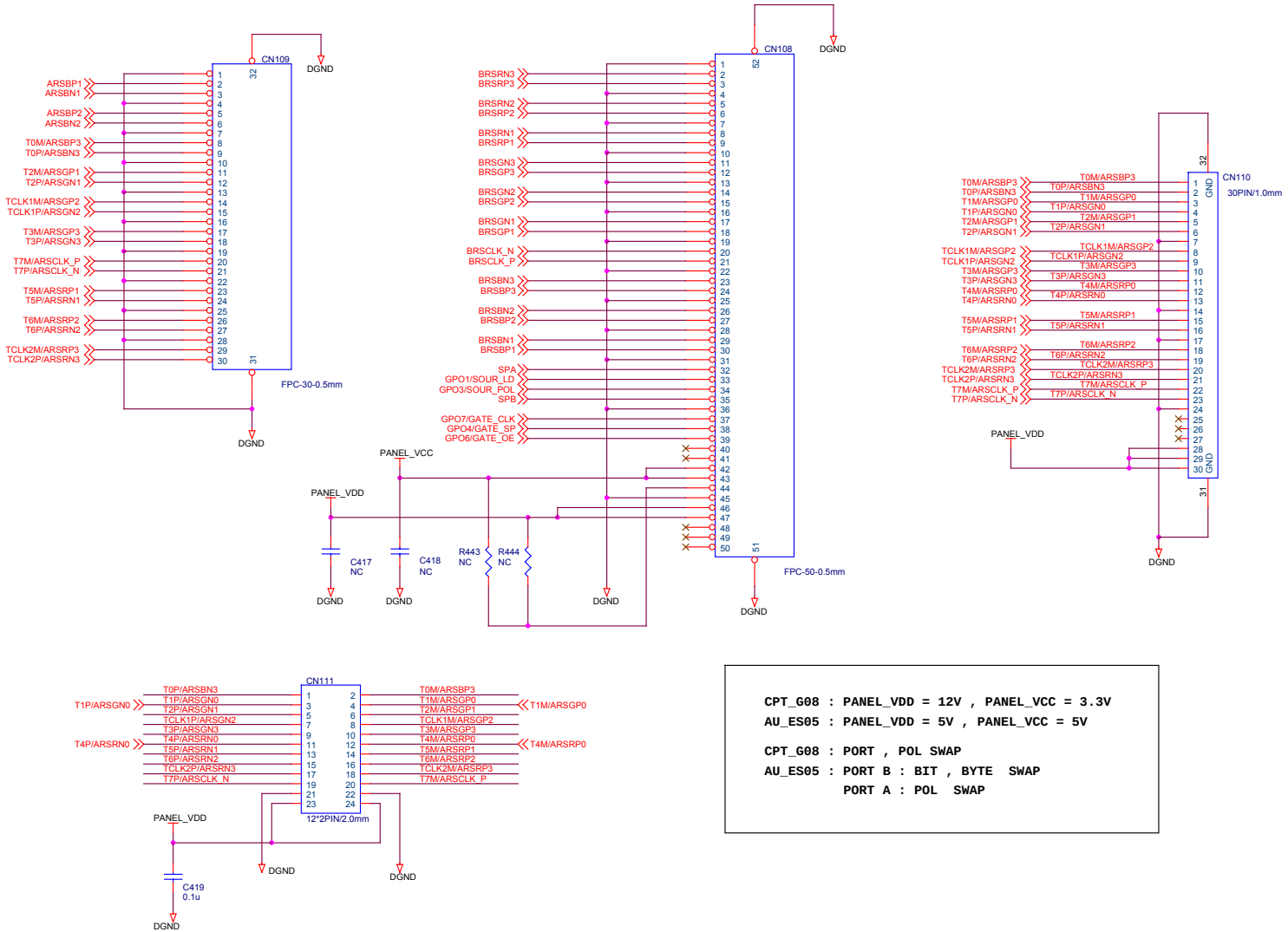


```
CPT_G08 : PANEL_VDD = 12V , PANEL_VCC = 3.3V
AU_ES05 : PANEL_VDD = 5V , PANEL_VCC = 5V

CPT_G08 : PORT , POL SWAP
AU_ES05 : PORT B : BIT , BYTE  SWAP
          PORT A : POL  SWAP
```

| | | | |
|---|---|---|---|
| Title | MFM | | |
| Size A3 | Document Number | PANEL OUTPUT | Rev 0.2 |
| Date: Wednesday, March 30, 2005 | Sheet 5 of 12 | | |

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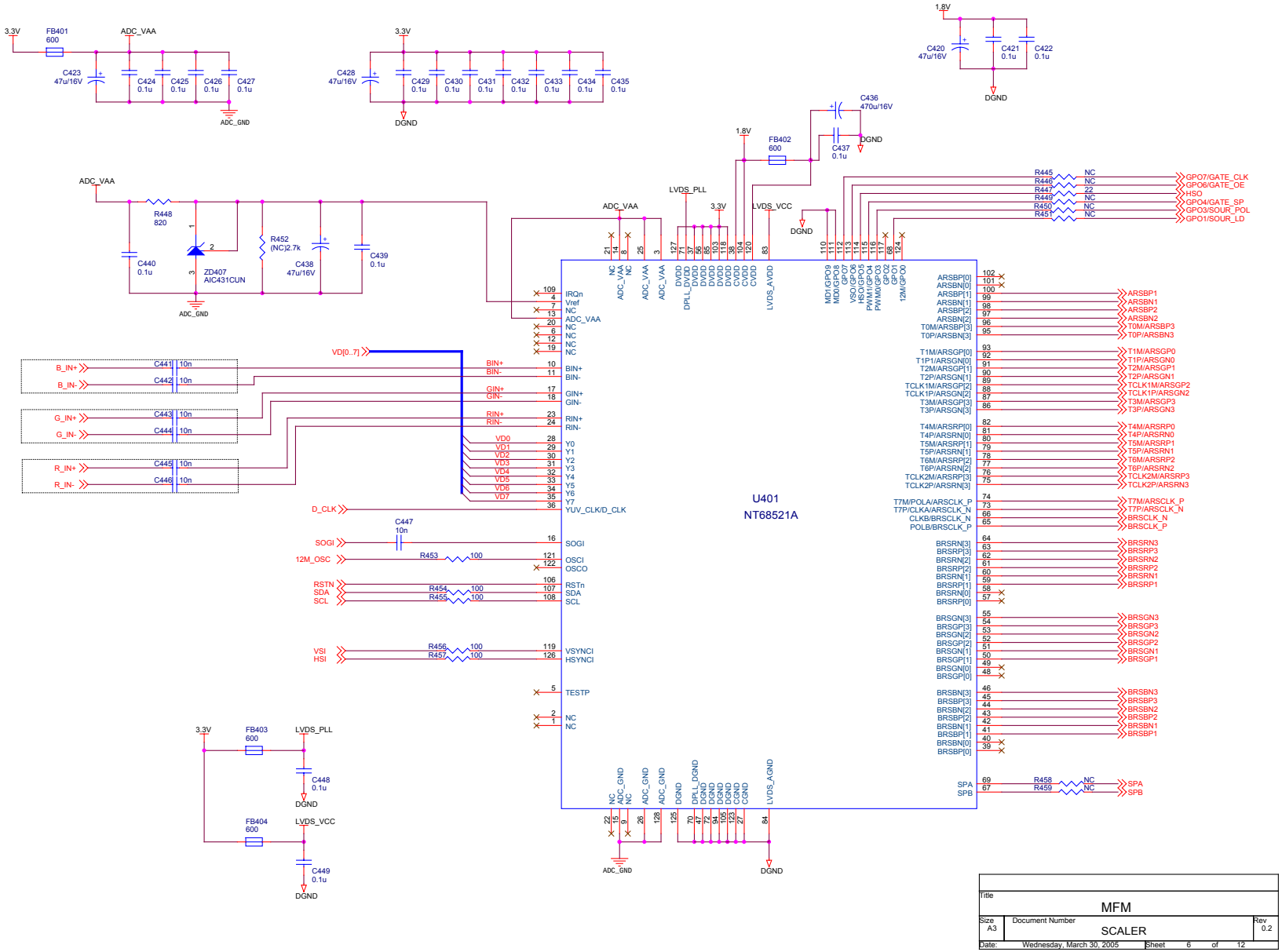




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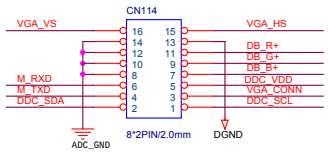
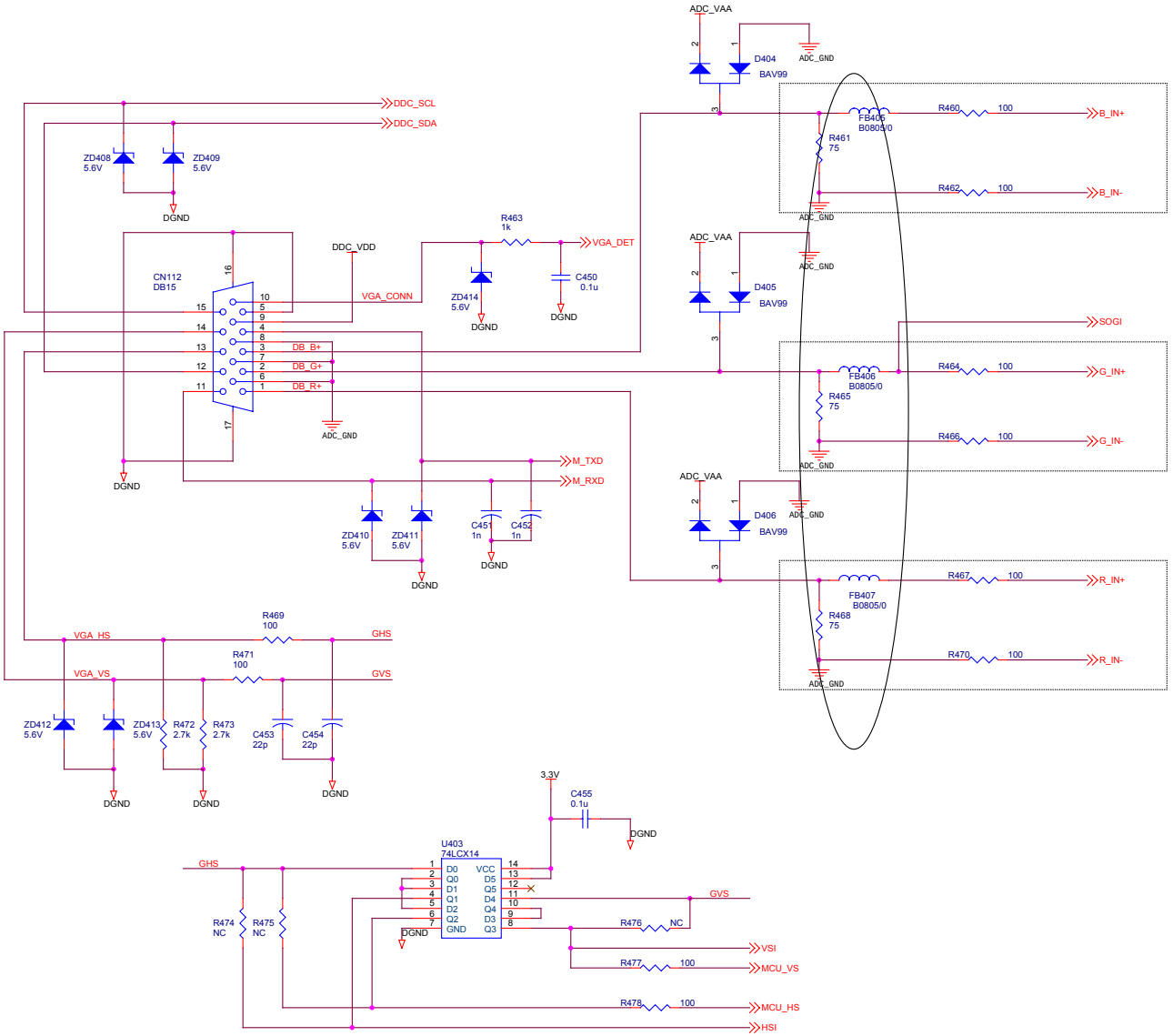



040418 add D-sub built-in Pitch 2.0mm

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| Title | MFM | | |
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| Date: Wednesday, March 30, 2005 | Sheet 7 of 12 | | |



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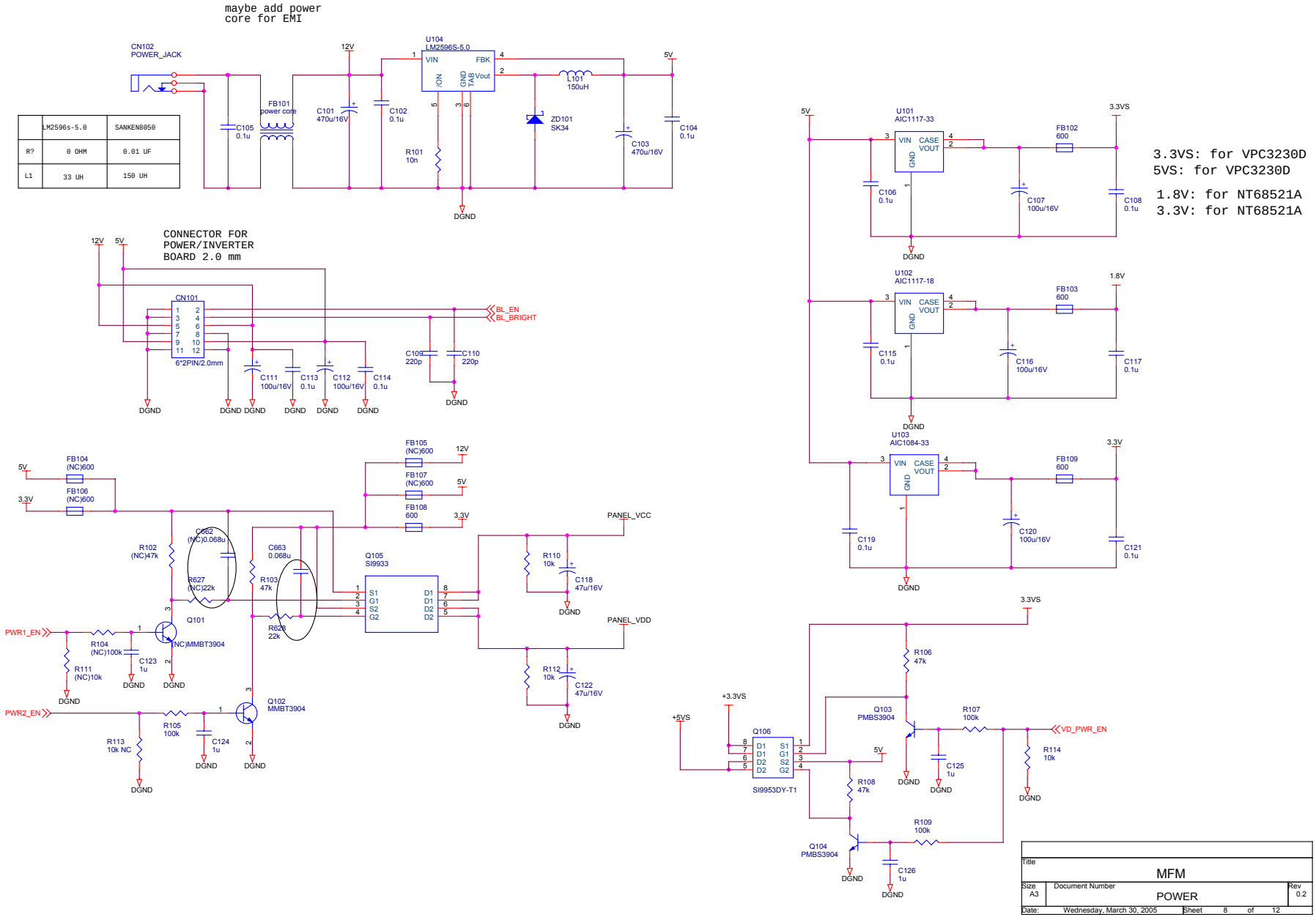


3.3VS: for VPC3230D
5VS: for VPC3230D

1.8V: for NT68521A
3.3V: for NT68521A

| Title | MFM | |
|---|---|---|
| Size A3 | Document Number POWER | Rev 0.2 |
| Date: Wednesday, March 30, 2005 | Sheet 8 of 12 | |



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## 12.2. Power Board

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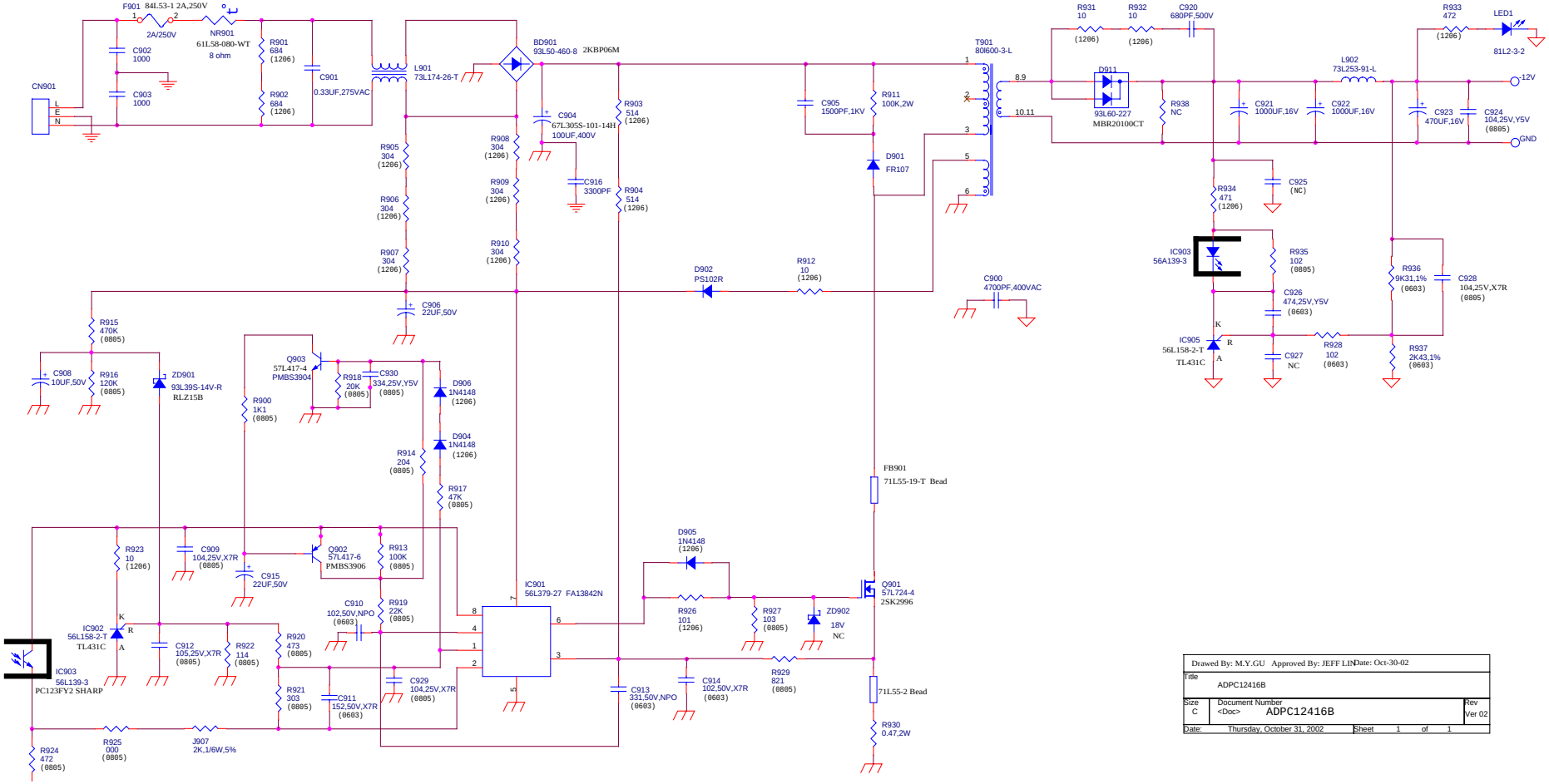


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| Drawed By: M.Y.GU | Approved By: JEFF LIN | Date: Oct-30-02 | |
| Title: ADPC12416B | | | |
| Size: C | Document Number: <Doc> ADPC12416B | | Rev: Ver 02 |
| Date: Thursday, October 31, 2002 | Sheet 1 of 1 | | |



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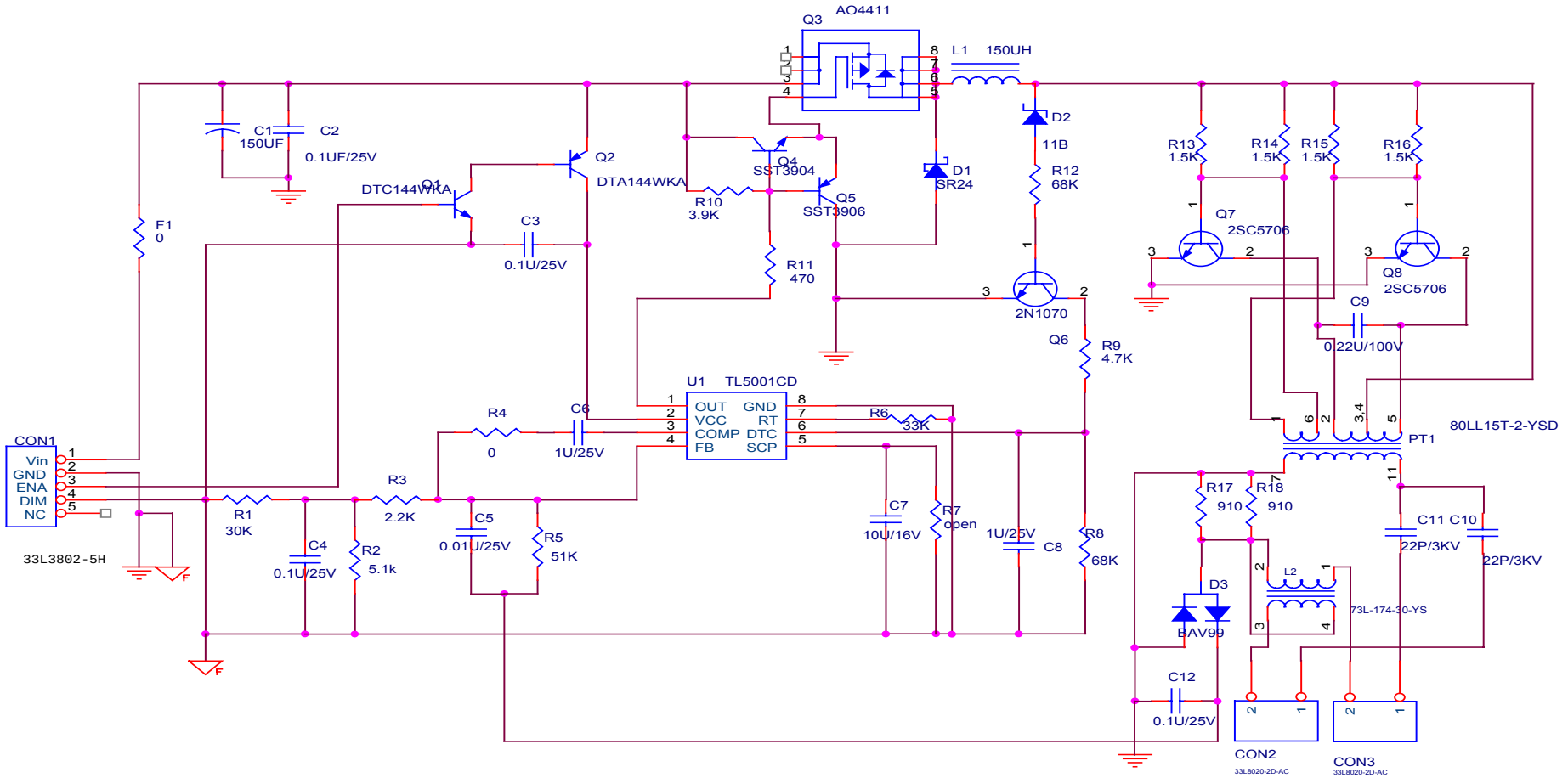


is power GND

is signal GND

| | | |
|---|---|---|
| AOC (Top Victory) Electronics Co., Ltd. | | |
| Title | 2LAMPS .INVERTER | |
| Size A | Document Number INPC560A5 (715* 1537-1) | Rev A |
| Date: | Sheet 1 of 1 | |



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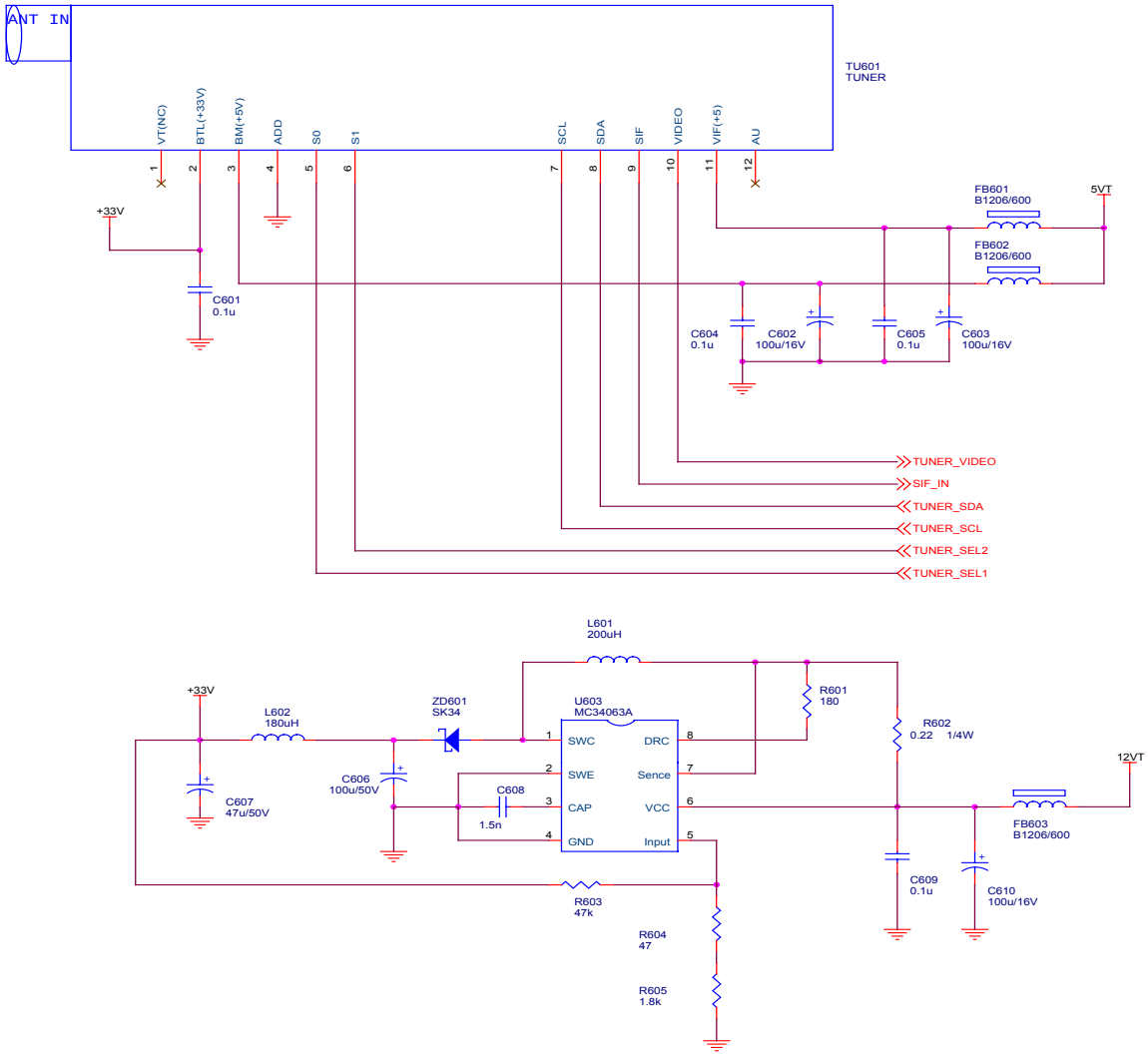
## 12.3. Tuner Board

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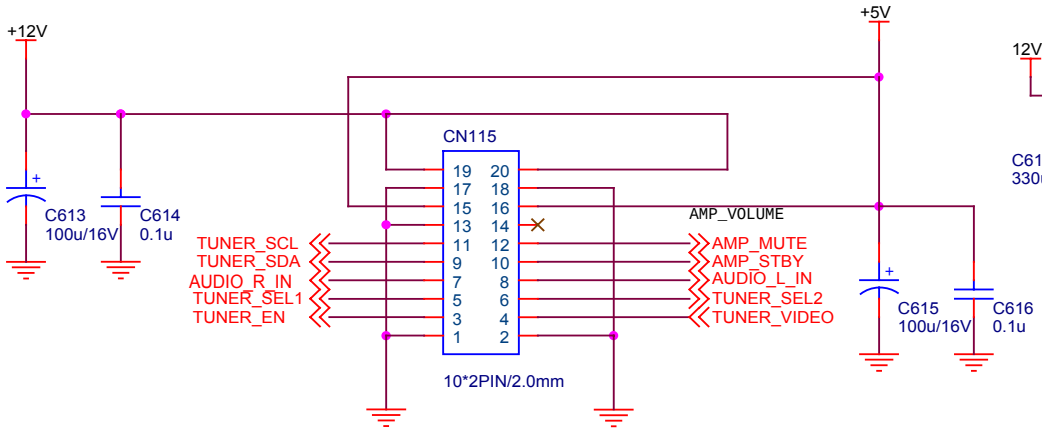


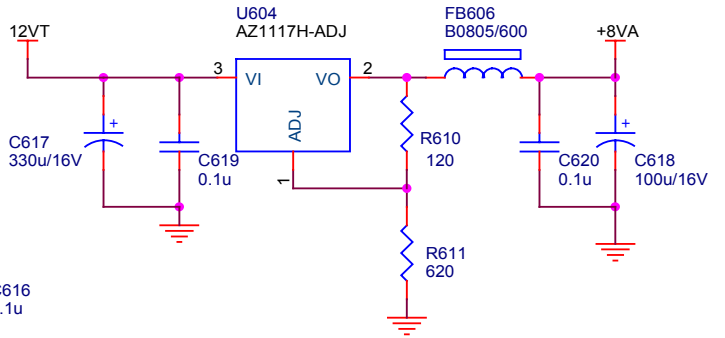


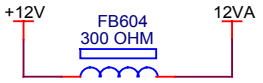


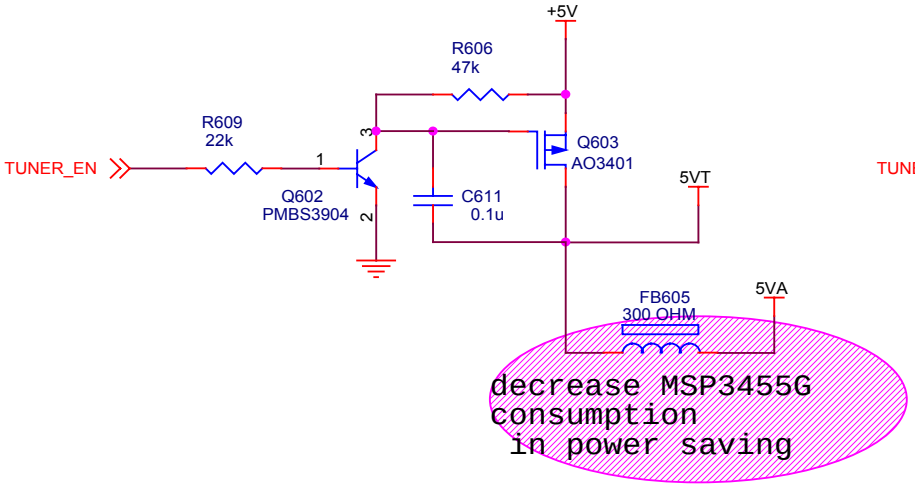


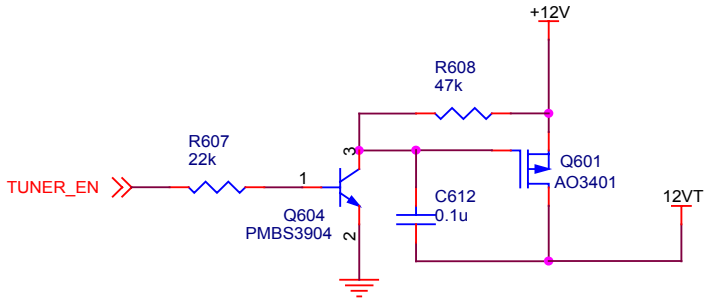


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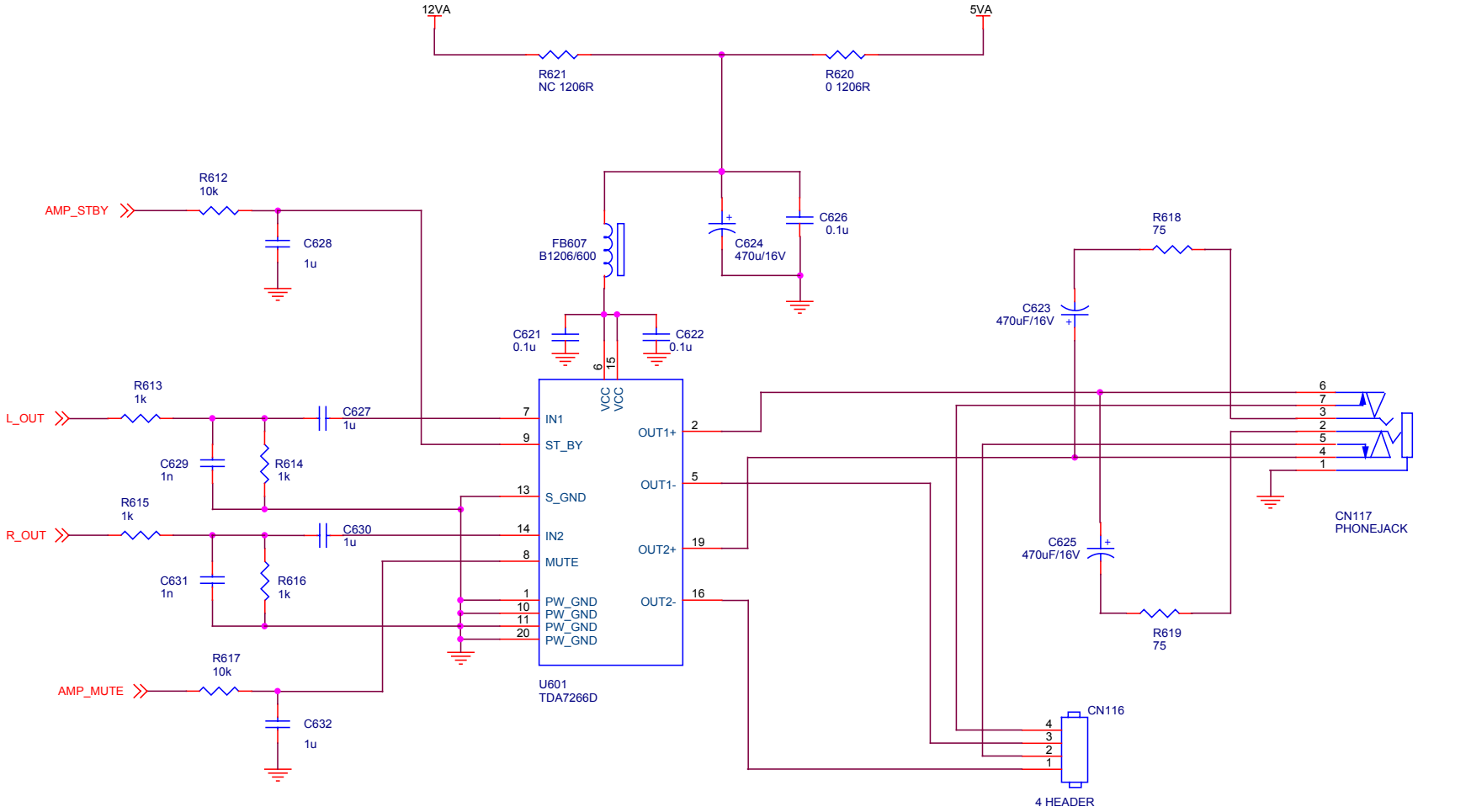
## 12.4. Audio Board

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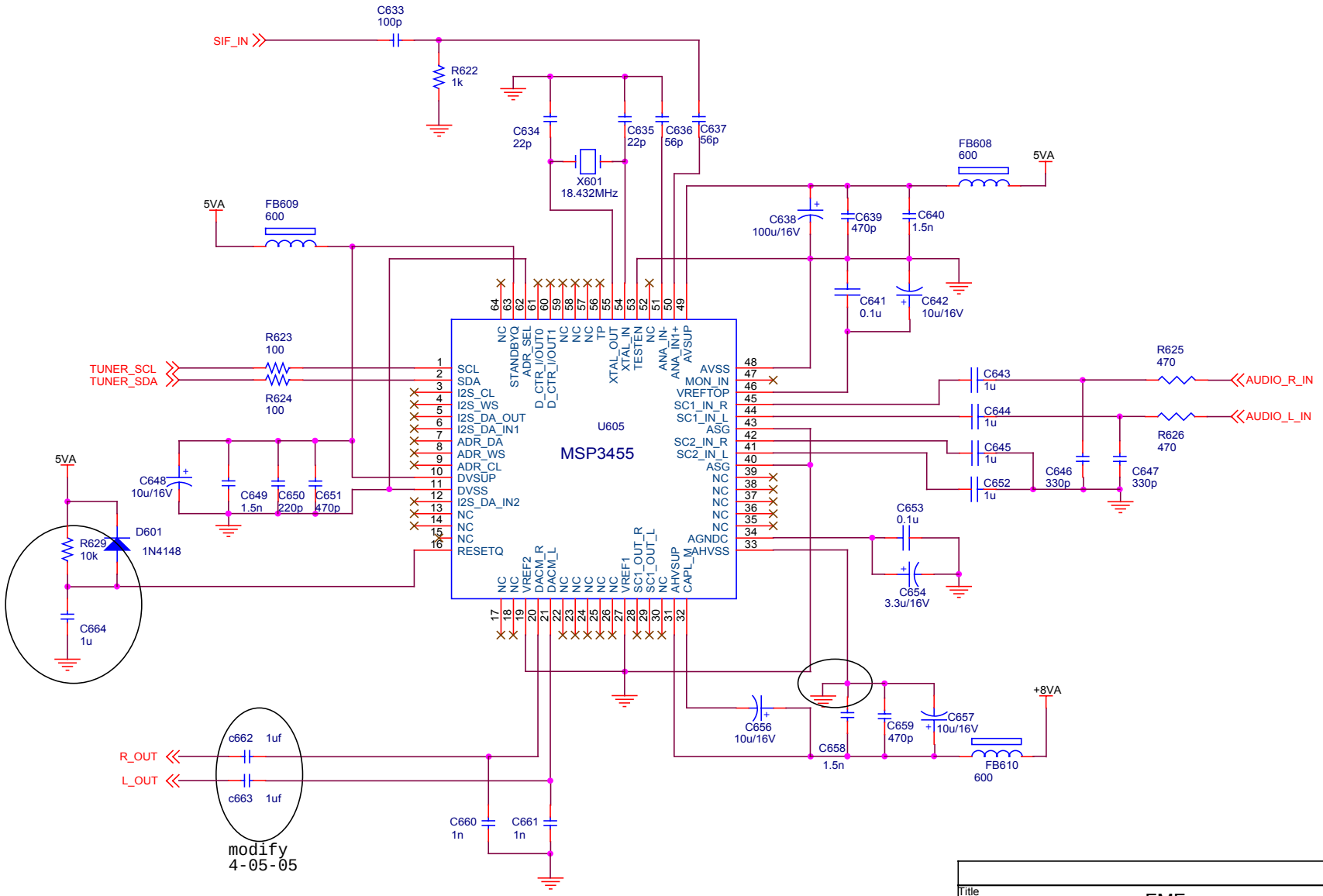


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